Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

80
N21.

Wanting; No. 10; 4.

THE NATIONAL NURSERYMAN

February, 1894.

Painesville Nurseries.

40th Year. 1,000 Acres. 28 Greenhouses.

Some extra fine Imported Stock, on which we can make low rates; strong, bushy, well furnished stuff; plenty of flower buds; altogether the best plants have ever handled.

Hardy Azaleas.—Mollis and Ghent; seedlings and named varieties.

Chinese Azaleas.—9 to 11 inch heads, bushy and clean; choice assortment best named kinds for forcing.

Rhododendrons.—Fine selection best named hardy and Catawbiense hybrids. 15 to 18 and 18 to 24 inches.

Tree Roses.—**Holland Stock,** in fine condition.

In cold storage cellars for spring delivery, the largest and most complete stock in the United States. Orders booked now and set aside in cellar ready for shipment any time wanted.

Fruit Trees.

All the leading varieties, especially fine lots of Standard Pears, Dwarf Pears, Plums, Apricots, Nectarines, Mulberries, etc.

Small Fruits.—The largest and best assortment, carefully dug and graded, pure stock.

Grape Vines.—Immense stock No. 1, one and two years, splendidly rooted.

Nut Trees.—Headquarters for Chestnuts, American and Japan; Butternuts, Black and Japan Walnuts, Shell-bark Hickories, Filberts, Pecans, etc.

Ornamentals.

We lead in this department. Largest and best stock for spring '94 have ever carried. Call attention to extra fine blocks of

Willows. — Wisconsin, Babylonica, Laurel-leaved, Gold-barked, Killmarnock and New American.

Poplars.—Carolina, Lombardy, Balsam, Aurea and Pyramidal.

Maples.—Silver, Wier's cut-leaved, Norway and Ash-leaved.

Flowering Thorns. — White, Pink and Paul's scarlet.

Tea's Weeping Mulberry, Young's Weeping Birch, White-leaf Weeping Linden, Imperial Cut-leaf Alder, White Ash, Scotch Birch, Purple Beech, Elms, Horse Chestnuts, Magnolias, Salisburia, Rose-acacia, European Euonymous, Tulip trees, etc.

Evergreen Trees and Shrubs.

One of the best collections of **Hardy Bulbs, Shrubs, Climbing Vines and Plants.**

75,000 Roses.

Strong, field grown Hybrid Perpetuals, Mosses and Climbers, clean and thrifty; no better lot in the country.

Seeds.—**Flower and Vegetable.**—The best, tested stocks at lowest rates.

Always open to inspection. Come and see.

No trouble to estimate on your list of wants. Spring Catalogue and Trade List FREE. Ready in January.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

Ellwanger & Barry

Mt. Hope Nurseries

FOUNDED 1840.

ROCHESTER, N. Y.

LEADING SPECIALTIES SPRING 1894.

STANDARD PEARS.
DWARF DUCHESSE.
CONCORD GRAPES.
CUTHBERT RASPBERRIES.
GOLDEN QUEEN RASPBERRIES.
AMERICAN CHESTNUTS.
BLACK WALNUTS.
CATALPAS.
DOUBLE-FLOWERED THORNS.
HORSE CHESTNUTS.
NORWAY AND WHITE SPRUCE.
ARBOR VITÆ, Pyramidal, American, Hovey's Compacta, Globosa.
HARDY FLOWERING SHRUBS,
HARDY ROSES.

AND A COMPLETE LINE OF GENERAL NURSERY STOCK.

CATALOGUES FREE. ESTIMATES FURNISHED.

READ! READ! READ!

I HAVE TO OFFER THE FINEST LOT OF . . . . . .

CUT LEAF BIRCH

IN THE COUNTRY.

Get my prices before placing your order elsewhere.

JAY WOOD, KNOWLESVILLE, N. Y.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

NURSERYMEN, FLORISTS, SEEDSMEN.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

Engravings of New Fruits Made at Low Prices.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

A. BLANC & CO., PHILADELPHIA, PA. Largest Assortment of **Bulbs at Wholesale** in the United States. Also new and rare hardy plants such as Elegans, Centrosema, Henchera, Wineberry, etc.

LOOK! LOOK! LOOK! LOOK!

ROSES! ROSES! ROSES!

HYBRID PERPETUALS, MOSSES AND CLIMBERS.

STRONG TWO-YEAR-OLD PLANTS! OUT-DOOR GROWN!

ON OWN ROOTS, except some of the mosses and certain other varieties, which it is very difficult or impossible to grow from cuttings. These are low budded, on Manetti stocks, and free from suckers.

ALL FINEST VARIETIES.

Ætna Moss, *dark pink*,
Alfred Colomb, *crimson*,
American Beauty, *deep pink*,
Anne de Diesbach, *carmine*,
Baltimore Belle, *cl. blush white*,
Baroness Rothschild, *pink*,
Blanche Moreau, moss, *white*,
Blanche Robert, moss, *white*,
Caroline de Sansel, *flesh*,
Caroline Marniesse, *creamy white*,
Cl. Victor Verdier, *rose*,
Cl. Jules Margottin, *carmine*,
Coquette des Alpes, *white*,
Coquette des Blanches, *pure white*,
Crimson Globe, moss,
Fairy Queen, *white*,
Fisher Holmes, *crimson*,
Gen. Jacqueminot, *crimson*,
Gen. Washington, *red*,
Gloire de Margottin, *crimson*,
Gracilis, moss, *deep pink*,
Henry Martin, moss, *pink*,
Jules Margottin, *red*,
Madame Gabriel Luizet, *pink*,
Madam Plantier, *white*,
Magna Charta, *pink*,
Marguerite de St. Amande, *rose*,
Maurice Bernardin, *crimson*,
Paul Neyron, *deep rose*,
Persian Yellow, *golde* ,
Pierre Notting, *deep maroon*,
Prince Camille de Rohan, *crimson*,
Princess Adelaide, moss, *pale rose*,
Queen of the Prairie, cl., *red*,
Salet, moss, *light rose*.

EMPRESS OF CHINA—Our new perpetual blooming climber. To dealers who will make this valuable new variety a specialty with their agents we will furnish plates free of charge. Send for description.

We also have all the choice varieties in other lines. CLEMATIS, ORNAMENTAL SHRUBS and TREES, GRAPES, etc., etc.

All our stock is now stored in our cellars and so we can promise as early shipment as is desired. Write for our prices. We want your trade and will make them right.

JACKSON & PERKINS,

NEWARK, WAYNE CO., NEW YORK.

SEND US YOUR WANT AND SURPLUS LISTS.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing*.

Send for Price-list and Circulars.

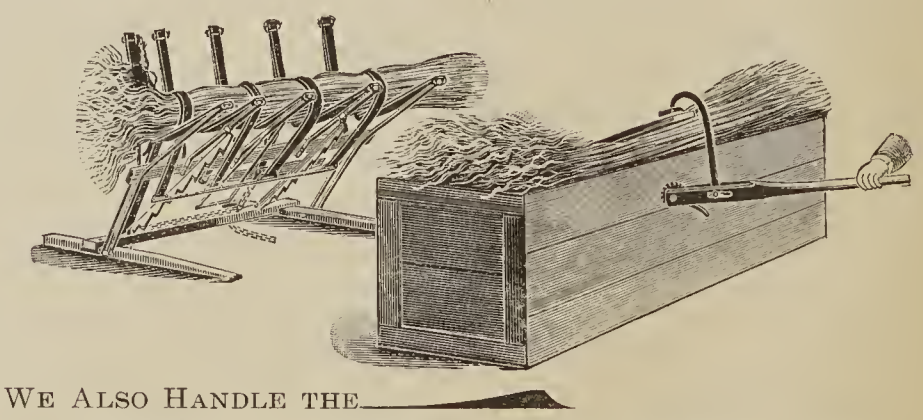
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp.

It is *simple* to use as a *cant hook*. Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Bales, Clamp and Truck.

STEVENSON & THOMAS, = = NORTH BEND, NEB.

ALLEN L. WOOD, Rochester, N. Y.

WOODLAWN NURSERIES . .

WHOLESALE ONLY--NO AGENTS.

GROWERS OF

SMALL - FRUIT - PLANTS.

Special attention given to furnishing Nurserymen with all kinds of TRANSPLANTS ON CONTRACT.

We offer for the Spring of '94, the largest and most complete collection in the United States, of high grade SMALL FRUIT PLANTS.

Special attention is directed to the following in large quantities :

Raspberries—Brandywine, Brinkle Orange, Cuthbert, Clark's, Caroline, Doolittle, Gregg, Golden Queen, Hansell, Herstine, Johnson Sweet, Kansas, Lovett's, Mammoth Cluster, Marlboro, Ohio, Palmer, Rancocas, Souhegan, Shaffer's Colossal, Tyler. Thompson Early, Japan Wineberry, Royal Church, etc.

Blackberries—Agawam, Bangor, Early Cluster, Early Harvest, Erie, Stone's, Hardy, Kittatinny, Lawton, Lucretia Dewberry, Minnewaska, Snyder, Taylor, Wachusett, Wilson's Early, Wilson Jr., etc.

Currants—Black Naples, Cherry, Black Champion, Red Dutch, Fay's Prolific, La Versailles, North Star, Lee's Pro., W. Grape, etc.

Gooseberries—Downing, Golden Prolific, Pearl, Red Jacket, Smith Improved, Triumph, etc,

Also a large stock of 2 yrs. **Grapevines,** of all the leading kinds.

Strawberries—Greenville New, and all of the old and new varieties.

Special attention called to the following in large quantities :

Asparagus—Conover's Colossal, Palmetto and Elmyra.

Rhubarb—Myatt and Victoria, 20,000 (3 yrs.) and 500,000 (2 yrs.) also large quantity 1 year.

☞For miscellaneous stock look at Wholesale Catalogue for Fall ; ready Aug. 1st, free.

Special quotations on large lots.

HOFFMAN NURSERIES.

We Have in Surplus for Spring of 1894

Standard Apples, Pears, Plums,

AND A LARGE LIST OF

ORNAMENTAL

SHRUBS AND TREES.

ALL GOOD STOCK.

WILL BE PLEASED TO QUOTE SIZES AND PRICES OF VARIETIES.

PLEASE SEND US YOUR LIST OF WANTS

E. M. & H. N. HOFFMAN,

ELMIRA, N. Y.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

Clematis.—Strong plants. Holland and own growth. Jackmanii : Fair Rosamund : Miss Bateman ; Seiboldü Hybrida (Syns. **Peter Henderson ? Ramona ? ?**) : Duch. of Edinburgh ; Fortunii ; John Gould Veitch ; Lucie Lemoine ; Crispa : Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.

Honeysuckle.—Hall's Japan, Monthly Fragrant.

Ampelopsis Veitchii. American Ivy.

Japan Snowball.—Strong, fine plants.

Roses, H. P's and Mosses.—Strong plants, own roots and budded.

Tea Roses.—Fine plants, 4 inch pots.

Tree Roses.—Elegant plants. Lowest price in America.

Oak-leaf Mt. Ash.—Elegant trees. Low price.

Cut-leaf Birch.—8 feet, perfect trees.

Purple Birch.—4 feet, **true purpurea.**

Young's Weeping Birch.—5 feet stems.

Lilac, Weeping Pendula.—5 feet, not budded on lilac.

Hydrangea P. G.—A fine lot of strong plants.

Flowering and Foliage Shrubs.—Fine assortment.

Paeonies.—A grand collection.

Paeonies, Tree.—Nice plants in quantity.

Industry Gooseberries.—3 years. Plants matchless.

Blackberries.—Strong, nicely trimmed to one cane.

Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry.

Grape Vines.—A complete assortment.

Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

Baltimore and Richmond Nurseries.

Japan Pear Seedlings . . .

Are the best stock for all sections. They do well on both light and heavy soils. Order a few thousand and be convinced. We use no others. Prices low in quantity. Quotations given on application.

WE WILL EXCHANGE SEEDLINGS FOR SUCH STOCK AS WE CAN USE SPRING OR FALL 1894, SEND SURPLUS LIST.

Peach Pits. . . . . .

We have a few Smock Pits of last season's crop, and can offer low to close them out.

OUR ARRANGEMENTS FOR THIS SEASON WILL INSURE A GOOD LOT OF THE FOLLOWING :

Smock, Southern Naturals, Promiscuous,

GET OUR PRICES BEFORE PLACING YOUR ORDER.

We are Wholesale Growers of a . . General Line of Nursery Stock and Invite Correspondence. . . . .

Franklin Davis Nursery Co.,

BALTIMORE, MD.

South St. Louis Nurseries,

WHOLESALE GROWERS, GENERAL STOCK.

Standard and Dwarf Pears, 100,000 trees, 2 years old, handsome, thrifty trees, well-rooted; the only home grown stock in the west.

Cherries, 2 years old, heavy grades.

European Plum on Plum, 2 years old, first-class, light first-class and medium grades.

Roses, own roots; strong 2 years field-grown bushes; Hybrid Perpetuals, Climbing and Moss.

Shrubs, large bushy plants; Hydrangeas, Calycanthus, Lilacs, Honeysuckles, Fringes, Weigelias, Snowballs, etc.

Cut-leaved Weeping Birch, 4 to 5 ft., 5 to 6 ft., 6 to 7 ft.

Lowest possible prices for early orders.

Car lots a specialty.

Price-list mailed after Feb. 1. Send for one.

S. M. BAYLES,

Station "B," St. Louis, Mo.

Stake Labels

FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	inch;	1 1-2	x	5-16	inch.
18	"	1 1-2	x	1-2	"
21	"	1 3-4	x	3-4	"
24	"	2	x	3-4	"
27	"	2 1-2	x	7-8	"
30	"	3	x	7-8	"

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. Samples Free.

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

SYRACUSE NURSERIES AND "LAKESIDE" STOCK FARM.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Cherries.

A very fine line of

Ornamental Trees and Shrubs,

suitable for LAWNS and PARKS, and a very large, exceptionally choice l st of

Roses.

All of which will be offered at low prices to suit the times

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

-OUR-

Live Stock Department

Is replete with HORSES and CATTLE of all ages and both sexes, of the following breeds:

STANDARD BRED,

FRENCH AND AMERICAN COACH,

CLEVELAND BAY,

HACKNEY,

CLYDESDALE,

PERCHERON,

and Driving, Coach or Carriage Horses, single or in pairs.

-ALSO-

Holstein Friesian Cattle

Of the most noted milk and butter producing strains

Correspondence solicited and the same will be promptly attended to

THE SMITHS & POWELL CO., Syracuse, N. Y.

1838. 56 Years. 300 Acres. **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, Matrimony Vines, Trifoliate Orange, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries and Wineberries, Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS,

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES, WILLIAM PARRY, PARRY, N. J.



THE "P. BARRY" PEAR.

REDUCED FROM NATURAL SIZE.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

VOL. II. ROCHESTER, N. Y., FEBRUARY, 1894. NO. 1.

WESTERN NEW YORK HORTICULTURISTS.

The thirty-ninth annual meeting of the Western New York Horticultural Society held in this city on January 24th proved the most interesting in the history of the society. This statement has been applicable to each succeeding meeting; there has been steady growth of membership and increasing interest in the proceedings which each year become more valuable to the members. The society stands first in importance among the large number of such societies in the country. Dr. Peter Collier of the New York State Experiment station at Geneva, said: "I hope sometime to see a society which shall equal this one. There is none now that equals it. I believe there never will be one that will excel it."

President William C. Barry presided and Secretary John Hall recorded the proceedings. Among the prominent horticulturists present were nearly all the noted nurserymen and fruit growers of Western New York and the following from other points: Professor Munson, of the Maine Experiment station; A. M. Smith, of St. Catharines, Ont; L. B. Pierce, Secretary of the Ohio Horticultural Society; Professor W. J. Green, of the Ohio Experiment station; Professor John Craig, of the Experiment station at Ottawa; President Linus Woolverton, Ontario Fruit Growers' association; M. B. Waite, Department of Agriculture, Washington, D. C.; Professor S. A. Beach, Dr. Peter Collier, of the New York State Experiment station, Geneva; Hon. Charles W. Garfield, Grand Rapids, Mich.; George W. Campbell, Delaware, O.; Prof. M. A. Caldwell, Prof. L. H. Bailey, Cornell University, Ithaca, N. Y.

President Barry's annual address was full of information and good counsel, as usual. Following are abstracts:

OUTLOOK FOR FRUIT GROWERS AND HORTICULTURISTS.

The present outlook for fruit growers is not by any means hopeful; on the contrary, the prospect is rather discouraging. This industry, like almost every other, has suffered from several causes. Many will attribute their failures to excessive production, while some will ascribe their losses to the ravages of diseases and insects. I will not attempt now to trace the causes of failure, but rather to suggest some means to meet and overcome the difficulties which confront us. As regards excessive production, all are agreed that there is annually sent to market an over supply of indifferent fruit. Buyers and consumers everywhere complain that not enough attention is given to the production of a high grade fruit and that consequently the market at certain times becomes glutted with an article, the sale of which has to be forced. Gathering, handling, sorting and packing come in for their share of the criticism and condemnation. It is therefore obvious that every fruit grower and horticulturist should give more care and attention to these important details. The best business methods should be adopted. The demands of the various markets should be attentively studied: old and worn-out machinery and tools should be discarded, and labor saving devices and implements should be employed, so that the greatest economy in labor can be practiced. Watchfulness of all kinds, in cultivation and management should be avoided, and expenses reduced. When competition is so keen, success is impossible if we do not keep fully abreast with the times both in thought and methods.

AGRICULTURAL AND HORTICULTURAL LITERATURE.

There is nothing that will tend to make home more pleasant and attractive than a good library, and especially in the case of the farmer and fruit grower, who during a portion of the year have much time to spare indoors. A good weekly horticultural and agricultural paper is a necessity. The reports of the experiment stations, as well as those of the department of agriculture should be obtained and read carefully. These pamphlets are prepared with great care and embody the latest information on questions of the highest importance to every tiller of the soil. Most of these publications are sent free on request, so that a library can be started easily and inexpensively. The experiment, stations, too, should be consulted whenever questions difficult of solution present themselves, and much time and experience will be gained that way, and expensive errors avoided.

PROGRESS MADE IN CONTROLLING INJURIOUS INSECTS AND FUNGOUS DISEASES.

The grest losses which have been sustained the last few years in consequences of injurious insects and fungous diseases, have almost discouraged fruit growers; but, thanks to the scientists, relief is at hand. Effectual remedies have been proposed and applied with success. Spraying is now practiced quite generally and with satisfactory results. The codlin moth, or apple worm, bud moth, tent caterpiller, canker worm, plum curculio, currant worm, cherry and pear slug, apple scab, black knot and grape mildew are all recognized, understood, and controlled. It is surprising how effectually and inexpensively the work can be done by those who have had some practice. I cannot allow the occasion to pass without referring to the agricultural department, under whose direction so many experiments have been made, and so many successful remedies suggested. The value of various kinds of insecticides and fungicides has now been fully determined and established, so that the different formulæ can be relied upon. But not until the practice has become more general will the results be noticeable; every owner of a fruit farm, or even a fruit tree, should procure a spraying machine and learn how to operate it. Apathy, prejudice, and ignorance should no longer prevent the adoption of remedial measures. A systematic treatment should be carried on throughout the state. Nothing will be be gained unless a general effort is made.

EXPERIMENTS IN PREVENTING LEAF DISEASES OF NURSERY STOCK IN WESTERN NEW YORK.

During the seasons of 1891 and 1892 several experiments were made by D. G. Fairchild of the department of agriculture at Geneva with a view of preventing the various leaf diseases in nursery stock. The objects of these experiments was to determine whether the leaf blight of pear, cherry, plum and quince stocks, and the powdery mildew of the apple, could be prevented by the use of bordeaux mixture or ammoniacal solution of copper carbonate. In nearly all cases the experiments were successful and already nurserymen are spraying their stocks to prevent defoliation. A report in detail of the experiments is furnished by the agricultural department.

WINDBREAKS FOR THE PROTECTION OF ORCHARDS.

The wind storms of September last which were so destructive to fruit teach a lesson which should not be forgotten. Although such storms are of rare occurrence, yet early in the autumn it is not un-

usual to have high winds which cause the largest and best fruit to drop, and it seems advisable that planters should prepare for such emergencies by planting on the north and west sides of their orchards, windbreaks either of evergreen or deciduous trees. Care must be taken not to surround the orchard for in that case the air would be too much confined. These windbreaks will also be a protection against winter storms.

THE MISSION OF THIS SOCIETY.

I cannot too frequently impress upon you the usefulness of this association and the importance of the work it has in hand. The present, when business generally is so depressed, is a most opportune moment to revive interest and enthusiasm in fruit growing and farming. Horticulturists, recognizing the losses and reverses sustained by those engaged in other industries, will begin to place a higher estimate upon their own resources and the stability of their calling, and will be encouraged to greater efforts than before. It is the purpose of this society to encourage and foster fruit culture, and to elicit and disseminate correct information pertaining to it as well as to other branches of terraculture. Much good has been accomplished thus far; let us therefore continue to work harmoniously, seeking higher degrees of improvement in the fulfillment of our mission.

S. D. Willard's talk on plums provoked a long discussion in which there was a concensus of opinion that the Japan plums are destined to work a revolution in the culture of this fruit. Mr. Willard said that Luther Burbank's experiments in crossing the Japan plum with the native varieties promise to produce results far beyond anything yet obtained. Mr. Hale said that no fruit will give more satisfactory results for marketing purposes than the Japan plums. They are quick growers, quick and prolific bearers, are hardy and the fruit is showy and of excellent quality.

Mr. Willard and the Kieffer pear were subjects of good-natured attack from all sides. Mr. Willard said that although the fruit had been declared to taste like a cross between a quince and a raw potato, still the pear was being planted in all directions and it seemed that the people were determined to have it. He had shipped carloads of the fruit to Detroit and Chicago and secured $5 and $8 per barrel for it, and had received notice immediately to duplicate the order. "It may show that all the fools are not dead yet," said he, "but those are the facts."

BETTER TREES, HIGHER PRICES.

In the course of his "Rambling Talk on Horticultural Topics," J. H. Hale of South Glastonbury, Conn., one of the largest fruit growers in the country, said:

"There is an annual sale of upwards of 100,000,000 trees every year. The sharp competition has stimulated cheap production, cheap handling, and by far the greater part of the trees sold fail. The purchaser, even, is careless. He feels that he can get another if the tree he buys does not live. The grower and the purchaser of novelties give greater care to the growth of such a favorite as they may have championed. In the case of novelties there is usually the proper amount of care, because of the high price paid for them. It seems to me that there is a chance for the nurserymen to produce better stock and more of it and charge what it is worth. If this is done I believe we shall get better returns. The tendency of the time is to produce good fruit at low prices, producing sure and steady sales. The demands of the markets are for larger and finer fruits and we must have more showy fruits. Our California friends grow finer fruits and take money from consumers right under our eyes. But are we going to let our friends of the Pacific coast, with better climatic conditions, beat New York state and Connecticut ingenuity? We ought to be ashamed of ourselves if we do. We can not force the market. We have got to find out what the market wants and then go home and produce it. In the cultivation of peaches I have been much interested in frost drainage. It has become generally known that frost runs down hill almost as readily as water. Elevated lands with an abrupt slope to a valley will give peaches when higher plateaus without slopes have failed. The horticulturist has spent much time in the production of fruits, but has neglected the business end—the sale of fruits. The intelligent dealer knows more about the market demands than the fruit-grower. The tendency of the times is toward consolidation in all lines. The smaller growers and producers must get together. Tilling the soil is the best business on earth and because of that fact any man, no matter how unsuccessful at any thing else, can succeed at it. That is the reason the tillers of the soil do not care to organize, but they must. The purchaser of fruit cannot tell where to get any more of the same if it is good, but owners of large orchards are going to make a name for their fruit. I advocate tight packages instead of ventilated packages for fruit. Strawberries wrapped in cotton may be kept fourteen days in prime condition. I was surprised to hear that apple culture was being overdone. My experience is that intelligent apple culture does not keep up with the demand. Last year there was a short crop of apples, but I am ashamed to find good oranges in the market and poor apples. There is a demand for apples and the demand is for fine fruit. I believe there is no danger of overdoing the planting of any fruit so long as the fine qualities are produced."

OFFICERS AND COMMITTEES.

The following officers and committees were chosen:

President—William C. Barry, Rochester.

Vice-Presidents—S. D. Willard, Geneva; Wing R. Smith, Syracuse; George A. Sweet, Dansville; C. L. Hoag, Lockport.

Secretary and treasurer—John Hall, Rochester.

Executive committee—C. M. Hooker, Rochester; C. W. Stuart, Newark; Nelson Bogue, Batavia: E. A. Powell, Syracuse; H. S. Wiley, Cayuga.

Botany and plant diseases—Professor S. A. Beach, Geneva; Professor L. H. Bailey, Ithaca; Professor A. N. Prentiss, Ithaca; Professor M. B. Slingerland, Ithaca; C. H. Stuart, Newark.

Chemistry—Dr. G. C. Caldwell, Ithaca; Dr. S. A. Lattimore, Rochester; Dr. Peter Collier, Geneva; Mr. Fletcher, Geneva.

Entomology—Professor J. A. Comstock, Ithaca; C. M. Hooker, Rochester: J. F. Rose, South Byron; R. T. Hewson, Penn Yan; C. H. Stuart, Newark.

Foreign fruits—George Ellwanger, Rochester; C. W. Stuart, Newark: John Charlton, Rochester; George G. Atwood, Geneva; George H. Moody, Lockport.

Flowers and budding plants—Patrick Quinlan, Syracuse; Virgil Bogue, Albion; E. A. Long, Buffalo; C. W. Seeley, Rochester; C. H. Perkins, Utica; Lester Webb, Corfu.

Garden vegetables—W. Paddock, Geneva; C. H. Perkins, Newark: J. N. Mersereau, Cayuga: E. S. Hayward, Rochester.

Grapes and small fruits—C. M. Hooker, Rochester: I. D. Cook, South Byron; H. M. Ulsner, Syracuse; Frank Lewis, Lockport; George S. Josseyln, Fredonia.

Native Fruits—W. C. Barry, Rochester; Professor L. H. Bailey, Ithaca: L. Woolverton, Grimsby, Ont.; A. M. Smith, St. Catherines; E. A. Bronson, Geneva.

Nomenclature—W. C. Barry, Rochester; J. J. Thomas, Union Springs; S. D. Willard, Geneva; D. Bogue, Medina.

Ornamental trees and shrubs—George Ellwanger, Rochester; George G. Atwood, Geneva; John Charlton, Rochester; Charles Little, Rochester: Robert Ades, Rochester.

Ornithology—Charles A. Green, Rochester; Professor J. H. Langville, Washington, D. C.; Dr. C. Hart Merriam, Washington, D. C.

MINNESOTA HORTICULTURAL SOCIETY.

The twenty-seventh annual meeting of the Minnesota Horticultural Society, in Minneapolis, January 9–12, was largely attended. President J. M. Underwood, of Lake City, presided. In his address he recommended the establishment of local branches of the state society. Professor N. E. Hanson, who is assistant professor of horticulture at the Iowa State Agricultural College and experiment station, presented a paper on the sand cherry as a stock for plum and cherry. J. L. Harris, La Crescent, reported successful use of the sand cherry. He recommended the propagation of native plums, from roots and root cuttings, as preferable to propagation by grafts, especially as to apples. Professor Hansen presented a plan of propagation in vogue at the large nursery of Silas Wilson, Atlantic, Iowa, who plants 4,000,000 vines annually with great success, including 1,250,000 Concords. This plan gets 75 to 80 per cent. of vines of the cuttings, one-half of which live and produce. Z. K. Jewett, of Sparta, Wis., was made an honorary member for one year. Mr. Jewett gave a new way of treating enemies of plums, by fencing the trees in and turning fowls in on them. The fowls killed the curculio. S. M. Emery, formerly of Wabasha, now a director of the experiment station of Montana, at Bozeman, read a paper on "Irrigation for Minnesota." It was thought by some that by planting pits the best varieties of plums were produced. To develop better plums plant the best seed, of the best variety, and continue that, and the fine varieties will follow. Professor Hansen thought pit planting was not so well as grafting and budding, by both top and root cutting. Plum planting was recommended to be in double rows, 10 feet apart, and the trees 10 feet from each other.

On the life of Minnesota apple trees, Mr. Brand, of Rice county, showed that trees properly planted and cared for are not short lived. He described trees of Rice county, thirty years old, that are bearing 14 bushels to the tree since coming into bearing, and are in fine life yet. Other speakers maintained that short life was the fact, and it was better to replant often. Mr. Hains reported in detail on five or six new seedlings discovered during the year, mostly scattered in the southern counties. Scions of these have been grafted and will be put into the experiment stations next year. There were also reported some new plums, also in the southern part of the state. Mr. Taylor detailed thirty-six years' experience with windbreaks. Now he does not believe in them. Fruit is stronger of stem when exposed to the wind. Mr. Lyman, of Excelsior, described a seedling crop twenty years old, which commenced bearing six years ago, and bears every year from 8 to 15 bushels of apples.

Secretary A. W. Latham, in his report, gave the membership strength of the society as over four hundred and twenty-five members. He advised that the annual report, instead of being published in one volume, be issued in twelve parts, one for each month, in fact to make a small monthly magazine out of the present cumbersome book. The society is in prosperous financial condition. Treasurer Titus Day reported that receipts of the year had been $1,179.55, with expenditures $1,155.94.

J. H. Harris' report of the exhibit of the state at the World's Fair showed that there were 800 plates of fruit, besides the exhibits in solution and in jars; of apples and Siberian crabs there were 125 varieties shown; peaches, 4 varieties; natural plums, 45; and grapes, 55 varieties. Minnesota's part in the organization of the Columbian Pomological Society was detailed. C. L. Whitmore, of Chicago, editor of *Hardwood* urged the union of horticulture, pomology and forestry.

The committee on fruit list recommended the following varieties, which were endorsed by the society:

Apples—For general planting, Duchess and Hibernal; for planting in favorable localities, Wealthy, Longfield and Tetofsky; for trial in limited quantities, Patten's Greening, Peerless, Okabena, Hotchkiss, Anisim, Charlamoff, Kaump and Arctian.

Crabs and Hybrids—For general cultivation, Virginia, Martha, Whitney, Transcendent, Early Strawberry, Briar Sweet, Minnesota and Hyslop; for trial, Tonka, Dartt's Hybrid, Greenwood, Faribault, Arctic Gideon No. 6.

Plums—DeSoto, Rolling Stone, Forest Garden, Wolf and Weaver; for trial, Rockford, Ocheeda and Owatonna.

Grapes—Concord, Delaware, Brighton, Moore's Early, Worden, Janesville and Cottage.

Raspberries, Red—Turner, Cuthbert, Marlborough, Brandy Wine. Black—Ohio, Soughegan, Nemaha, Gregg and Shaffer.

Blackberries—Ancient Britain, Snyder.

Currants—Red Dutch, White Grape, Victoria, Long Branch, Holland and Stewart.

Gooseberries—Houghton and Downing.

Strawberries—Crescent, Warfield, Haverland, Beder Wood, Capt. Jack, Wilson, Bubach and Parker Earle.

The following officers were elected: President, J. M. Underwood, Lake City; secretary, A. W. Latham, Minneapolis; treasurer, Titus Day, Farmington; vice-presidents, F. W. Kimball, Austin; S. B. Richardson, Winnebago City; L. E. Day, Farmington; R. S. Mackintosh, Langdon; Col. J. H. Stevens, Minneapolis; Mrs. Jennie Stayer, Sauk Rapids; J. O. Barrett, Brown's Valley; executive committee, Wyman Elliott, Minneapolis; J. S. Harris, La Crescent; Prof. S. B. Green, St. Anthony Park; John P. Andrews, Faribault; Clarence Wedge, Albert Lea; entomologist, Prof. Otto Lugger; librarian, J. W. Latham.

MICHIGAN HORTICULTURAL SOCIETY.

The annual meeting of the Michigan State Horticultural Society at Lawton, was attended by many prominent horticulturists, including President T. T. Lyon, Hon. C. D. Lawton, Hon. Charles W. Garfield, R. M. Kellogg, T. V. Munson of Texas, R. Morrill and Professor L. R. Taft. Mr. Lawton, the pioneer, said that Michigan could still grow all kinds of fruits, but that in many sections grapes proved the most profitable. During last season 200 cars loaded with 3,000 baskets of grapes each, were shipped, besides 30,000 baskets sent by express as far even as Oregon and Texas. R. Morrill of Benton Harbor, in a paper on "The Possibilities and Probabilities of Horticulture," said that consumption of fruits was increasing as fast as production and the man who planted intelligently and largely would reap a large reward. He attributed much of the failure to the irresponsible tree peddler and nursery brokers of the East. Mr. Morrill said the acreage in the vicinity of Benton Harbor would be largely increased the coming spring. Not less than 250,000 peach trees would be set, besides an immense amount of other fruits. Mr. Munson said he was still looking for the ideal grape which was sure to come Many improvements, he said, are in sight.

C. Engle, of Paw Paw, who had spent many years in growing seedlings and has produced several of the greatest promise, gave an interesting account of his methods. He mashed the grapes and allowed them to stand a few days when the seed would separate from the pulp readily. He put them in a tin pan and left them where they would freeze during the winter, planting in the spring about an inch deep in very rich soil, and gave thorough cultivation In the fall many shoots would be a foot long, and many would fruit the third season. He was asked if he had yet found anything that would equal the Concord as a market grape and he replied that he had not, but had many of superior quality for his friends. J. H. Hawley, of Ganges, and N. W. Lewis, of Gobleville, said that the profits of the peach season had been very large and the increase of acreage the coming spring seemed to be limited only by the supply of trees. The yellows were being held in check at all points and prospects were brilliant.

The election of officers resulted as follows: President, R. Morrill; secretary, Edwy C. Reed; treasurer, E. H. Scott; executive board, C. W. Garfield, F. J. Russell, T. T. Lyon.

SOUTHWESTERN IOWA HORTICULTURISTS.

The nineteenth annual meeting of the Southwestern Iowa Horticultural Society was held at Glenwood on December 19th. In a paper on "Future of Orcharding in Southwestern Iowa," John Y. Stone said: "It would require the gift of prophecy to properly discuss the subject, yet from present indications the future is promising. The bluff and hill lands of this region are peculiarly adapted to fruit, and our people are becoming aware of it. We are at the gateway of the market of the West and North, and with direct lines of transportation to the East, we shall be able to reach the markets of the world, and especially in long-keeping winter apples we are sure to succeed."

H. A. Terry gave seven best varieties of plums as being, Hawkeye, De Soto, Milton, Hammer, Charles Downing, Wolf and Wyant. In grapes, Moore's Early, Worden, Concord and Pocklington were recommended; the Pocklington was considered as the most reliable and best white grape. The Eaton had disappointed Silas Wilson and others, and the foliage of the Moyer is not satisfactory. Mr. Lotspeech succeeded in growing peaches by inducing several branches to grow from the root, or as low as possible to get them, and bending down and covering. The trunks are pegged down and kept there, while the tops are raised and staked. The spring of the wood allows the trees to be turned right and left, and thus they can be easily covered, to be raised and staked each spring.

The following officers were elected: President, M. G. Edwards, Glenwood; vice-president, W. M. Bomberger, Harlan; secretary and treasurer, George Van Houten, Lenox. Council Bluffs was chosen as the place for the next meeting.

MINNESOTA FORESTRY ASSOCIATION.

At the annual meeting of the Minnesota State Forestry Association, Secretary J. O. Bartlett read a paper in which he urged the growing of timber lands and the planting of trees to perpetuate the growth of the valuable pine tree. Hon. Platt B. Walker stated that the destruction of pine forests in North America is appalling. The supply in the northern states and Canada is fast being exhausted, while that of the southern states is not suffering such rapid devastation, but is fast disappearing. The difficulty, he said, is in the low valuation of timber, which will continue until lumbermen are compelled, as in Europe, to plant a certain number of trees for every one cut down. The experiment of giving away prairie land with the understanding that so many trees were to be planted thereon was a most dismal failure. There are still 17,000,000 acres of forest reserves in the United States, and Mr. Walker stated that in 1892 there were cut in the lumber regions of Minnesota and Wisconsin 4,530,315,000 feet of timber.

EASTERN NURSERYMEN'S ASSOCIATION.

The Eastern Nurserymen's Association held its annual meeting in this city on January 24th, and elected these officers: President, William C. Barry, Rochester; vice-president, R. G. Chase, Geneva; secretary and treasurer, William Pitkin, Rochester; executive committee, S. D. Willard, Geneva, N. Y.; George A. Sweet, Dansville, N. Y.; Irving Rouse, Rochester, N. Y.; Wing R. Smith, Syracuse, N. Y.; C. W. Stuart, Newark, N. Y.

J. M. UNDERWOOD.

J. M. Underwood, whose portrait we present in this issue, is president of the Jewell Nursery Co., of Lake City, Minnesota. Mr. Underwood's connection with the nursery business dates back to 1861. He was extremely fortunate in that his early education in this line was derived from the late Dr. P. A. Jewell, who was probably the most thorough and practical horticulturist in the Northwest. Having grown up in the nursery business, Mr. Underwood is thoroughly familiar with all the details of planting and growing nursery stock. He has devoted a great deal of time to the selection and propagation of what may be termed the hardy, iron-clad varieties, adapted to the cold climate of the Northwest. He has given particular attention to the propagation of new and promising varieties of apples, plums, currants, etc. Among these are the Okabena apple, a seedling of the Duchess, and the North Star Currant, a valuable seedling of the Victoria. A number of very promising specialties are held back until they can be given a thorough test to demonstrate their value. It is impossible for one not familiar with the nursery business in a severe cold climate to comprehend the obstacles and difficulties to be overcome in establishing a large enterprise like the Jewell Nursery Co. Starting in 1868 with ten acres, the plant now comprises over one thousand acres, two hundred and fifty acres of which are devoted to raising a general line of nursery stock, the balance consisting of farm lands, residence property, pastures, etc. In 1884, the Jewell Nursery Co. was incorporated and added a herd of thoroughbred Holstein-Friesian cattle, which has grown to be an important branch of the business.

Mr. Underwood, as president of this corporation, has developed a rare business ability. He is a man of broad, progressive views, ever ready to lend a helping hand to any worthy enterprise. He is a keen observer and close reader, and he has rendered much valuable service to the cause of horticulture and floriculture. He is now serving his third term as president of the Minnesota State Horticultural Society and he is in the prime of life; he will continue to exert a marked influence in the horticultural interests of the Northwest.



J. M. UNDERWOOD.

VALUE OF FRUIT.

Professor H. E. Van Deman, pomologist of the U. S. Department of Agriculture says: "When we think of it there is nothing the human system needs and craves so much as good water. If it is inside beautifully tinted wrappers, the skins of strawberries, peaches, plums, pears, apples, oranges, lemons, etc., combined with nutritious food and healthful acids, it is the more relished. Think of the price we pay for what is little less than water, colored and flavored by nature so as to be pleasing to the eye and to the palate. To the fruit grower let me give encouragement to go on supplying the public demand. Try to make your fruit as large and luscious as possible, and be assured that it will be appreciated, and in most cases well paid for. Keep your land as rich as possible and you will thus produce fruit at the least cost. The most expensive fruit to the grower is the poorest he raises, especially if badly packed."

In response to inquiry concerning commercial peach growing in Michigan, Prof. L. R. Taft says in *American Gardening:* "Peaches can be grown with profit in every county from Berrien to Grand Traverse along the lake shore; Allegan and Van Buren counties probably lead in the amount exported. Peaches are being planted largely near Niles, and in favorable locations are proving profitable. In the vicinity of Benton Harbor, South Haven, Grand Haven, Muskegon, Whitehall, Shelby, and Hart, they are grown extensively. In some seasons the crop is even better in the interior than on the lake shore; the counties most largely engaged in the business being Washtenaw, Jackson, Hillsdale, Calhoun, Clinton, Ionia and Kent.

Among the very best tree labels is a strip of zinc an inch wide and three inches long. The name may be written with a common lead pencil and is very durable—sometimes lasting for many years.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY
THE NATIONAL NURSERYMAN PUBLISHING CO.,
305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., FEBRUARY, 1894.

LESS STOCK AND BETTER.

This is the watchword which every nurseryman should take up and herald throughout the land. It expresses the result which must be attained before the nursery business will return to its former prosperous condition. Each nurserymen should look at the question squarely and resolve to grow better stock and less of it. He will, in this way only, secure a fair price for his labor. The country is filled with stock of low grade produced under circumstances intended to enable sales to be made at a rate inconsistent with that for which good stock could be sold. Even the largest and most prominent growers are producing cheap stock as well as the best. There is no difficulty in disposing of good stock. It is in the disposal of the poorer qualities that the evil results. There would be less poor stock on the grounds of the growers, large and small, if greater care were taken in its production.

MUNICIPAL NURSERIES.

In a recent issue of *Garden and Forest* the establishment of municipal nurseries is advocated in connection with remarks upon the recommendations of leading nurserymen of kinds of trees for street planting. It is stated that the plan has been successfully adopted in Paris and Washington. It is probable that for very large cities like Paris, London, New York, Brooklyn and Washington, such a plan would be found desirable. But for cities of ordinary size the amount of planting of street trees would hardly warrant the authorities in adding to the numerous municipal departments one devoted to the raising of trees. There are many things which the largest cities require above those of ordinary size and possibly a municipal nursery is one of them. But the facilities which the many standard nurseries of this country possess for the proper raising of suitable trees for ornamental purposes are sufficient to supply any demand in this direction at prices which leave little or nothing to be gained by comparison with what a municipality could provide. What is most needed by cities is, as referred to by the journal quoted, proper care after planting in permanent positions.

THE nurserymen have comparatively few meetings of their own but it is noticeable that the most prominent and the most progressive nurserymen attend regularly, in addition to their own meetings, those of the state and county horticultural societies where they obtain much valuable information regarding the demands of their customers, the planters. One of the most important meetings of the season was that of the Western New York Horticultural Society in this city and there the leading nurserymen of Western New York shared with the professors of colleges and the directors of state and federal stations the honors of discussion and representation upon the society's large and distinguished list of officers and committees. These meetings are of mutual interest to growers and planters of nursery stock. The cordial manner in which the two classes work together is a noticeable feature of these meetings. Their interests are one, and many of the best known nurserymen are horticulturists.

THE P. BARRY PEAR.

Among pears of recent introduction the seedlings raised by the late B. S. Fox of California are deserving of special notice. While they may not become popular for orchard purposes owing to their being poor growers in the nursery, they will always be valuable for the amateur on account of the delicious quality of the fruit. "The P. Barry" is one of these; it is of large size, pyriform; skin orange yellow, covered with russet dots and blotches; flesh very juicy, buttery, fine-grained; flavor sprightly, rich, excellent; resembles Anjou in texture of flesh and Winter Nellis in color of skin and juiciness of flesh; tree a poor grower and must be top-grafted. Orchardists can have it by top-grafting on a better growing kind. The best late winter pear; ripe in April; remarkable for its keeping qualities, showing no tendency to decay at the core. Ellwanger & Barry exhibited fine specimens of this pear at the World's Fair in latter part of May. The frontispiece is from a photograph of fruit grown by Ellwanger & Barry.

ONE OF THE BEST PUBLISHED.

NICHOLS & LORTON, DAVENPORT NURSERIES, DAVENPORT, IA. —"Enclosed find $1 for one of the best papers published."

OUTLOOK IN THE WEST.

FORT SCOTT, KAN., Jan. 25. — The whole region west of the Mississippi river has experienced a remarkably mild and very dry winter, up to the 18th inst.; so dry in fact, that in many places stock had to be driven to the large streams and feed hauled to them, simply because it was too far to drive to water and back again the same day. This was the case, even in Central Missouri, which is almost unprecedented, but on the 19th inst. the whole trans-Mississippi country was visited by a splendid rain, thoroughly soaking the ground, not only giving stock much needed water and filling the wells for domestic use, but saving the wheat crop from ruin. It has changed the outlook from a gloomy to a favorable one. You may ask, what this has to do with the nursery business. My reply is, that it has everything, for our welfare is closely connected with the farmers. If the crops fail, they cannot buy trees, especially in this new country, and hence no class of people watch the conditions of horticulture and agriculture closer than we do.

The weather has been so mild that, but for the fact of the ground being extremely dry, the fruit buds would have started so as to jeopardize next season's fruit crop; but in consequence of the dry condition of the ground, the buds have not started, and the outlook for a large crop of fruit of all kinds is exceedingly promising.

At the meeting of the Mississippi Valley Horticultural Society at Kansas City a few days ago, it was generally agreed that unless some disaster happens, the fruit crop will be immense next season. Last year there was no good fruit crop west of the Mississippi (outside of the grape crop), except in some localities. A small section in Colorado produced some fine apples and this has stimulated planting there the coming spring to a wonderful degree. The outcome of the nursery business last fall, as near as can be learned, is that collections were generally fair and the demand for nursery stock is much better than it was feared the conditions would admit.

At a meeting of the Western Association of Wholesale Nurserymen at Kansas City, December 18th, it was found that there was no large surplus of any class of stock outside of apple and grape vines, and these two articles were not in such large surplus as to jeopardize the final marketing.

It is difficult to estimate the magnitude of the plant this year, but from all that can be learned, it will not exceed the plant of spring '93, and probably will be less. The planting of commercial orchards continues unabated in Missouri, Arkansas, Eastern Kansas, Colorado, and New Mexico, and with a good fruit crop next year, the demand for fruit trees will be greatly increased.

U. B. PEARSALL.

Among Growers and Dealers.

Robert Douglas of Waukegan, Ill., is passing the winter at Mannville, Putnam Co., Fla.

Henri de Vilmorin has been re-elected first vice-president of the French Horticultural Society.

P. H. Foster, Babylon, N. Y., and Alexander N. Kay, Churchville, O., are going out of business.

George Gleason, representing Irving Rouse, returned last month from France, where he ordered fifty car-loads of stocks.

C. L. Watrous read a paper on "Apple Growing," at the recent meeting of the Iowa Producers' Association in Des Moines.

Nelson Bogue, of Batavia, has been appointed by Governor Flower a trustee of the New York State Institution for the Blind at Batavia.

A. L. Brooke of North Topeka, Kan., had shipped, up to January 6th, 150,000 trees and 1,000,000 seedlings on this season's business.

In the January issue of THE NATIONAL NURSERYMAN the names of S. M. Bayles, St. Louis, and B P. Hanan, Arlington, Kan., appeared incorrectly in their advertisements as "L. M. Bayles" and B F. Hanan."

W. A Manda has withdrawn from personal management of the business of the firm of Pitcher & Manda. He retains an interest therein. James R. Pitcher will manage the business. The name "Pitcher & Manda" will be retained.

The Western Trade Journal and Trade Review, of Chicago, pays a high compliment to J. Frank Norris, proprietor of the Brighton Central Nurseries at Brighton, N. Y. It refers to the establishment as entirely trustworthy, whose goods have been found identically as represented.

The Greeley (Colo.) Nursery will be under the foremanship of Richard Olson. Mr. Olson has had nine years' experience in Denmark and as many more in America. He has been six years in Colorado, being with C. R. Gallup and J. R. Russell most of the time while in that state.

Lewis Roesch, of Fredonia, N. Y., is especially gratified by the praise which the Chautauqua gooseberry received at the World's Fair, and at the State Experiment station at Geneva, N. Y. It is declared to be the largest gooseberry ever produced in this country and of excellent quality.

The Ricker National Nursery Co., has been incorporated at Elgin, Ill., with a capital stock of $50,000. It has purchased the Elgin Nurseries which were established in 1854, and were formerly owned by E. H. Ricker & Co. The officers of the new company are: President, E. F. Stephens, Crete, Neb.; Manager, E. H. Ricker, Elgin, Ill.; secretary and treasurer, J. G. McGregor, Chicago; directors, E. F. Stephens, E. H. Ricker, J. C. Wiltsie, E G. Minnick, A. McCallum.

From Various Points.

Western horticulturists say that next fall will witness the largest planting of fruit trees ever set out on the Pacific coast, especially the Northwest Pacific coast.

A party of twenty-eight prominent fruit growers of Southern Ohio will start, the first week in February, on a tour through California, visiting the cities and other orchards en route to the Midwinter Fair.

Apple trees are becoming very cheap, and there is no excuse for holding back from planting on account of prices. Some nurserymen in the central states are offering stock as low as $20 a thousand.—*Field and Farm*, Denver.

G. C. Brackett, Lawrence, Kansas, secretary of the American Pomological Society, states that the society will accept the invitation of the Board of Horticulture to hold an adjourned session at Tacoma, when on the Pacific coast in the winter of 1894-5, if it can be made practicable.

These annual reports of Rochester, N. Y. nurseries have been filed: Germania Nursery Co., capital stock $10,000, debts $250, assets $10 800; Standard Nursery Co., capital stock $10,000, debts $600, assets $11,100; United States Nursery Co., capital stock $10,000, debts $3,500, assets $13,000.

The committee on new fruits for 1894, consists of Messrs. A. McD. Allen, Leslie; D. W. Beadle, 450 Markham street, Toronto; and Mr. John Craig, Horticulturist of the Central Experimental Farm, Ottawa. These gentlemen are all experts, and are not easily puzzled in identifying varieties. It will not be easy for any nurserymen to impose old fruits on them as new kinds. —*Canadian Horticulturist.*

The returns made to the California Fruit Union, a co-operative association of fruit-growers shipping products to the East, show that, while the increase in shipments was large, the receipts were not so large as in the previous year. To show the enormous cost of handling fruit, these figures are given: Sales, $2,046,404; freight and refrigerator sevice, $972,284; cartage and commission, $155,213; net returns to the shippers, $918,606.

ILLINOIS HORTICULTURAL SOCIETY.

The Illinois State Horticultural Society at its annual meeting at Springfield elected these officers: president, Henry Augustine, Normal; vice-president, T. E. Goodrich, Cobden; secretary, Harry M. Dunlap, Savoy; treasurer, Arthur Bryant. Resolutions urging farmers to plant fruit trees along public highways and asking the legislature to enact laws for the protection of such trees, were adopted. The report on the World's Fair exhibits stated that Illinois cannot compete with California in plums and cherries. New York made the best show in pecans and grapes. New Jersey came next. New Jersey showed Japanese chestnuts, also pecans of great size. In Texas the pecan is successfully grafted. If this is true many otherwise worthless hickories in the middle sections of the West may grow the finest of the nut tribe. The next meeting will be held at Dixon.

PENNSYLVANIA HORTICULTURISTS.

At the annual meeting of the Horticultural Association of Pennsylvania in Harrisburg, January 17th, the following officers were elected: President, W. H. Moon, Morrisville; vice-presidents, H. M. Engle, Marietta; H. A. Chase, Philadelphia, J. E. Jamison, Swales; recording secretary, E. B. Engle, Waynesboro; corresponding secretary, W. P. Brinton, Christiana; treasurer, J. Hibbard Bartram, Millville; librarian, Thomas J. Edge, Harrisburg. The following committee on fruit exhibitions was appointed: J. C. Hepler, Reading; George C. Butz, State College; D. D. Herr, Lancaster. Papers were read by M. B. Waite, of the Department of Agriculture, Washington, D. C., Calvin Cooper, C. W. Good, H. W. Comfort and others.

RECENT PUBLICATIONS.

The high character of the Wisconsin State Horticultural Society is shown in the recently published proceedings of the meetings of last year. These have been neatly prepared in volume XXIII by the Secretary, B. S. Hoxie. The book is filled with practical information for the horticulturist and nurseryman and is one of the most valuable of the recent additions to horticultural literature. The Wisconsin State Society is doing excellent work. Its methods may well be an example for the emulation of others.

Parts 4 and 5 of "The Book of the Fair" lead the reader into fairy land. In Part 4 the exhaustive description of the government and administration departments is continued with the superb illustrations which depict with wonderful detail the progress of the nation. Beautiful groups of statuary and sections of elaborately frescoed ceilings are shown. Many grand general views of exteriors and their surroundings are included. Chapter eight introduces the reader to the manufactures building with its labyrinth of wonders. There are views from the roof, and beneath its vast expanse from every quarter, depicting every detail, including the search lights on top and the skeleton elevator wells which seemed like a spider's web connecting roof and floor. But it is in the representation of the choice exhibits of the products of the liberal arts from all nations that "The Book of the Fair" fairly outdoes itself. The photo-engravings of rare vases, trays and dinner sets in silver, gold and cut glass are examples of the highest art. Between the pleasure of seeing the originals and these reproductions little is left to be desired. The pictures are beyond comparison. Chapter nine describes and illustrates the foreign manufactures. Examples in Doulton, Royal Worcester, porcelain, bronze and fire gilt are beautifully arranged. The German section is introduced with a full page illustration of that magnificent exhibit which attracted so much attention. Chicago: The Bancroft Company.

A FIRST CLASS TRADE JOURNAL.

Franklin Davis Nursery Company, Baltimore, Md.—"We enclose check to your order for $1 for yearly subscription. We may say that our experience in advertising in your paper has been entirely satisfactory and we consider it a first-class trade journal.

ROOT GRAFTING.

On the subject of whole roots or piece roots, the *Country Gentleman* says:—"As nearly always happens when there are opposing opinions on any subject, the difference arises from unlike conditions. Under certain circumstances the whole root is best, while under other greater success attends the use of piece roots. With a good deep soil, admitting a full depth in planting, a whole root will promote early and vigorous growth, in the same way that a nursery tree taken up with plenty of roots will do better than one with the roots cut short. But with a shallow soil, or one of moderate depth, is will be difficult to plant the whole root deep enough, and in severe winters or in cold climates the tree would be injured at the place of junction. The piece root could be buried deep enough to prevent this difficulty. The piece root would present another advantage, being planted deeper and having a smaller mass of roots it would favor the issuing of new roots above the place of junction and from the graft itself, which in some cases would be an advantage. The shallow soil, however, should be always rich and well pulverized."

STRAWBERRIES. 999,999 Plants.
60 VARIETIES, OLD AND NEW.

Kansas, Older and Palmer. Raspberry Tips, and all other kinds of Small Fruit Plants. Lowest prices. Write for Catalogue.

F. W. DIXON, Successor to DIXON & SON, **NETAWAKA, KANS.**

RARE TREES.

Besides a fine stock of Fruit and Ornamental Trees, Shrubs, Roses, Vines, etc., of the staple varieties,
(WE HAVE OVER 1000 SORTS,)
WE OFFER THIS SEASON THE FOLLOWING RARE TREES.

WEEPING PURPLE BEECH.
WEEPING BEECH.
FERN LEAF BEECH.
WORLE'S MAPLE (a beautiful yellow sport of the Sycamore Maple—makes a fine contrast with the Schwedler Maple.)
WEEPING PEA TREE.
" HAWTHORN.
' HORNBEAM.
" FILBERT.
' LARCH.
" LABURNUM.
" LOCUST.
' SOPHORA.
WEEPING NORWAY SPRUCE.
TIGER TAIL SPRUCE.
COLORADO BLUE SPRUCE.
UMBRELLA PINE.
SWISS STONE PINE.
CUT-LEAF NORWAY MAPLE.
GOLDEN LEAF JAPAN MAPLE
DBL. WHITE HORSE CHESTNUTS.
TREE ROSES, Double Worked—Red and White.
SWEET BRIAR ROSES.
WISTARIA MULTIJUGA. (Bears racemes of flowers 2 to 2½ feet long.)
OLD FASHIONED CRIMSON "PINEYS."

And lots of other trees, etc., equally rare and desirable.

If you want any of the above good things or anything else in our line write us.

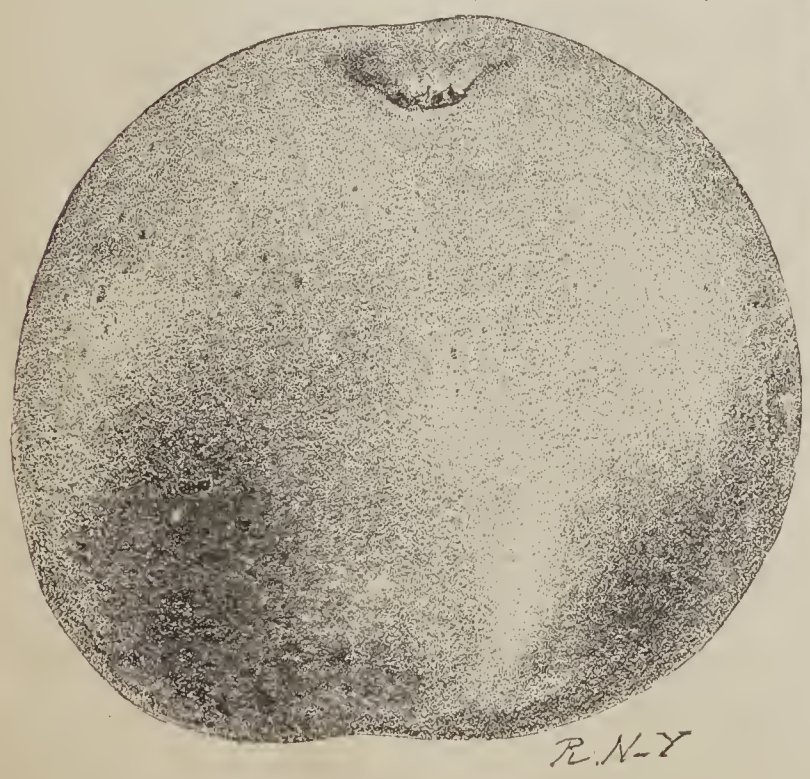
Address, **W. S. LITTLE & CO.,**
Commercial Nurseries, ROCHESTER, N. Y.

Princess Louise.

The New Canadian Apple. Hardy as Duchess; equal to Snow in quality; beautifully colored. Has taken First Prizes at all the leading shows in Canada for a dessert apple; recommended by American Pomological Society, Fruit Growers' Association of Ontario and Western New York Horticultural Society; received medal of merit from American Institute, and numerous other recommends. Have a Large Stock of Trees.

Write and get my prices, boxed and delivered on cars.

A. M. SMITH, St. Catherines, Ont.





Pearl Gooseberry.

A New Canadian Hybrid originated by Prof. Saunders, Ottawa, tested from Quebec to British Columbia. Free from mildew; larger and of better quality than Downing and the most prolific gooseberry known. Testimonials sent on application. Strong 2-yr. plants. Low price to trade. **A. M. SMITH, St. Catherines, Ont.**

NOTICE!

Is hereby given that we are ready to quote "hard times" prices . . . . on . . . .

Apple. Lowest prices ever quoted. BELOW "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for Cherry. Get our prices. . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

SURPLUS IN STOCK.

APPLE TREES.

	⅞ and up.	11/16 to ⅞	⅝ to 11/16
Baldwin	400	1,000	500
Ben Davis	90	1,000	700
Duchess of Oldenberg.	100	300	300
Danvers Winter Sweet	80	300	100
Golden Russett	100	.....	.....
Mann	200	1,000	500
Maiden Blush	120	400	300
Paradise Winter Sweet	170	700	500
Pewaukee	520	1,500	800
Tetofsky	50	300	200
Talman Sweet.	...	600	400
Walbridge	...	1,000	1,000
Wealthy	720	300	300
Spy	...	400	500
Hyslop Crab	400	400	100
Transcendant Crab	200	300	...

Named Russian Apricots, 2 year, fine.

1,000 4½ to 6 feet—¾ inch. 600 4 to 5 feet—⅝ to ¾.

Abundance Plum on Peach.

500 1 year, 3½ to 5 feet, branched. 300 1 year, 3 to 4 feet, branched.

Climbing and H. P. Roses.

2,000 Climbing Roses, 1 year.
8,000 Climbing Roses, 2¼ inch pot plants for planting in nursery row.
1,000 H. P. Roses, 1 year buds.

Grape Vines.

Concord—10.000 2 year, 40,000 1 year.
Ives—8,000 2 year, 15,000 1 year. Niagara—18,000 1 year.
Worden—7,000 2 year, 14,000 1 year.
Also, a nice lot of light grade vines.

2,000 Am. Arbor Vitæ, 4 ft. 500 Arbor Vitæ Pyramidalis, 4 ft.

WANTED.—1,000 Lombard Plums.

Write for prices: they will suit you.

AVENUE NURSERIES,

PAINESVILLE, O. W. B. COLE, Proprietor.



WE ARE HEADQUARTERS FOR

STEPHEN HOYT'S SONS'

Celebrated

Green Mountain Grape Vines.

The earliest and most delicious Early Grape yet introduced.

Also a fine line of

CHOICE NURSERY STOCK.

We supply dealers and the wholesale trade.
Send us your want list. Address

STEPHEN HOYT'S SONS, : : : NEW CANAAN, CT.

The Mt. Hope Nurseries of LAWRENCE, KANSAS,

Offer for Spring, 1894, **BEN DAVIS APPLE TREES** and other sorts in car lots or less quantity, including a liberal proportion of **GANO.** *Wholesale trade solicited.*

Address, A. C. GRIESA & BRO., Props.

GEYER BROS., ROCHESTER, N.Y.

SURPLUS

Standard Pears, Dwarf Pears, Cherries, Norway Spruce and Grape Vines.

ROSES.—Gen. Jacqueminot, Madam Plantier, Anne De Diesbach, Alfred Colomb, Paul Neyron, Prince Cam. De Rohan, Coquette Des Blanches, Pius IX, Queen of the Prairie, Gem of the Prairie, Luxemburg, Crested Moss, Salet Moss, Capt. John Ingram, White Moss.

OUR STOCK HAS THE BEST OF CULTIVATJON, AND IS HEALTHY AND THRIFTY.

Headquarters

For the following Surplus Stock for Spring Delivery, 1894:

75,000 PEACH ONE YEAR OLD FROM BUD.

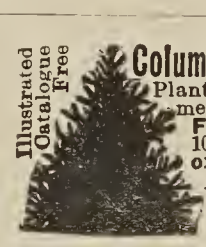
2,000 CAROLINA POPLAR, 9 TO 10 FEET.

2,000,000 STRAWBERRY PLANTS FROM YOUNG BEDS.

1,000,000 ASPARAGUS ROOTS ONE AND TWO YEARS OLD.

Nurserymen can save money by getting our prices before placing their orders elsewhere. Correspondence solicited.

W. M. PETERS SONS, WESLEY, MD.



Columbus Evergreen! A Souvenir of the World's Fair.
Plant an Evergreen from my nursery in memory of the great occasion, given **FREE** to each of my customers. Over 10 million trees for wind-breaks and ornamentation. Hardiest variety.
☞ Good Local Agents Wanted.
D. HILL, Evergreen Specialist,
DUNDEE, ILLINOIS.



At Wholesale.

STANDARD and DWARF APPLES, CRAB APPLES.
STANDARD and DWARF PEARS, CHERRY, PLUM,
GRAPE VINES, 2 yrs., STRONG.
RASPBERRIES-Transplants, BLACKBERRIES-Root Cullings.
ORNAMENTAL TREES, SHRUBS. CLEMATIS.

ROSES.

HYBRID PERPETUAL, MOSS, CLIMBING AND TEA.
EXTRA STRONG 2 yr. PLANTS, all on own roots.

Fine Assortment of Varieties

PRICES ON APPLICATION. Address

A. D. PRATT, Rochester, N. Y.

SITUATION WANTED. A reliable and thoroughly posted man, with inside and outside work, wants a position indoors in a **Seed, Plant or Nursery Establishment.** Could acceptably fill position as Superintendent of Cemetery. Address. J. B. T., 305 Cox Building, Rochester, N. Y.

The Greenville Strawberry,
The Eureka Raspberry, . .
The North Star Currant, .
The Ohmer Blackberry, . .

SURPLUS STOCK FOR 1894

Strawberries.—Dayton, Bubach, Haverland, Warfield, Cumberland, Parker Earle, Beder Wood, Edgar, Queen.

Raspberries.—Gregg, Souhegan, Ohio, Tyler, Palmer, Johnston Sweet, Hilborn, Cuthbert, Shaffer, Thompson's Early, Ada.

Blackberries.—Minnewaski, Erie, Snyder, Early Harvest, Taylor, Wilson, Jr., Lucretia Dewberry.

Gooseberries.—Downing and Industry.

Currants.—Fay's, North Star.

Grapes.—Concord, Niagara, Worden, Moore's Early, Pocklington.

Will be pleased to quote prices on any stock offered.

W. N. SCARFF, New Carlisle, O.



WE ARE HEADQUARTERS FOR THE

Improved Dwarf

Rocky Mountain Cherry.

(Cut shows habit of bearing)

Buffalo Berry, Juneberry,

and other valuable

Rocky Mountain Novelties.

MONEY IN THEM

For both DEALER and PLANTER.

Write for our prices to the trade.

CHAS. E. PENNOCK,

Fort Collins, Colo.

Millions of Visitors to the WORLD'S FAIR, CHICAGO, have admired the splendid collection of Plants exhibited by the **BOSKOOP HOLLAND NURSERY ASSOCIATION, on Wooded Island** consisting of Magnolias, Roses, Rhododendrons, Azaleas, Phlox, etc., and for which **the highest award, Medal and Diploma, has been granted.**

BUSINESS! BUSINESS! BUSINESS!

I NOW MEAN BUSINESS, and am prepared to accept import orders for Early Spring Delivery, at

Hard-Time Prices.

Send for Special Spring List of

Budded and Tree Roses, Clematis, etc.

and learn of the **SPECIAL OFFER TO DEALERS.**

C. H. JOOSTEN,

3 COENTIES SLIP. NEW YORK.

Agent for the BOSKOOP HOLLAND NURSERY ASSOCIATION.

Albertson & Hobbs,

Extensive Growers of

Apple, Peach, Cherry, Plum, etc.

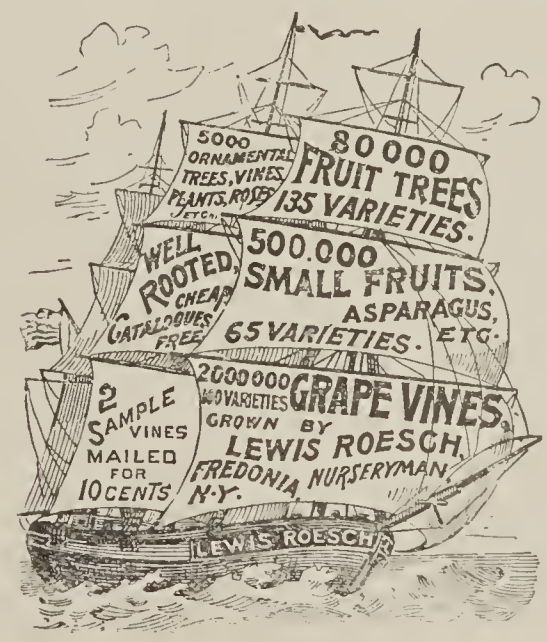
Are prepared to offer to the trade in **Car Load** lots, **APPLE** and **PEACH,** or will car general assortment of other stock.

Also large lot of **APPLE SEEDLINGS, MARIANNA PLUM** stocks, **BUDS,** etc. Special prices on early contracts. . . . . .

Try our new SPADES. See Circular.

Just the thing.—Geo. Peters & Co., Troy, O.
Fills its place well.—W. F. Heikes, Huntsville, Ala.
Just the thing for heavy digging.—Flemer & Felmly, Roselle, N. J.
Satisfactory; strong; stand heavy work.—Taylor, Peters & Skinner, North Topeka, Kan.
Correspondence solicited. Personal inspection courted. Address

Albertson & Hobbs, Bridgeport, Marion Co., Indiana.



STATE OF NEW YORK, } ss.
CHAUTAUQUA COUNTY. }

Personally appeared before me Lewis Roesch, who, being duly sworn, says that he propagated the above mentioned Vines, Trees and Plants for sale. That they are in prime condition, guaranteed strictly true to name and of size and quality represented in his Catalogue.

LEWIS ROESCH,
Fredonia, N. Y.

Subscribed and sworn to before me, this 10th day of January, 1894.

F. R. GREEN,
Notary Public.

To Exchange.

RUSSIAN and other Apricot trees, also Plum and Peach trees to exchange for Currants and Gooseberries. An assortment of both kinds wanted. State what you have to offer. Address

Emporia Nursery, Emporia, Kansas.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

Fine Wholesale stock of the two new Hedge plants,
LIGUSTRUM MEDIA, LIGUSTRUM IBOTII,
Splendid stock of **RUSSIAN GOLDEN BARKED WILLOW, RED CORNEL, FORSYTHIA SUSPENSA, HYDRANGEA PANICULATA** (Type.) **WHITE SPRUCE, NORWAY SPRUCE. CLEMATIS PANICULATA,** Splendid stock in all grades from extra heavy to mailing sizes.
Immense stock of Hardy Perennials, including best varieties of
IRIS, PHLOX, PYRETHRUMS, PÆONIES, HOLYHOCKS, LARKSPURS, ETC., ETC.
over a thousand distinct species and varieties.

THE READING NURSERY, (Established in 1854.)
JACOB W. MANNING, Proprietor, **READING, MASS.**
Wholesale Lists ready: write if you have not received one.

BUY THE BEST.

WHITNEY'S IMPROVED WESTERN TREE DIGGER.

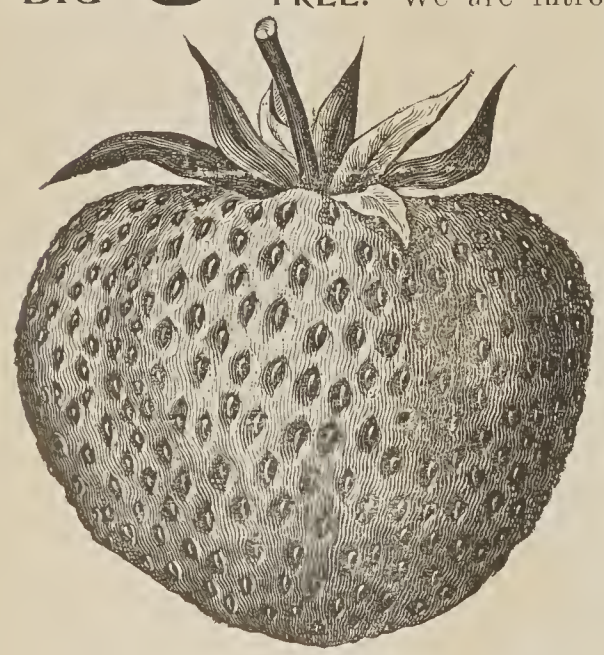
Manufactured by

N. A. WHITNEY,

FRANKLIN GROVE, LEE CO., ILL.

Sent for Prices.

OUR BIG 6 FREE STRAWBERRY given away FREE. We are introducing 5 of the Finest Strawberries ever introduced, and giving away our **BIG 6.** The *Rural New Yorker* says: **RIO** as a *first early* berry. This is well worthy of trial because of its size, shape, quality and color. The quality is excellent. M. A. Thayer: The more I see of the **RIO,** the better I like it.



Seedsmen and **Nurserymen** who desire to catalogue these berries will send for TERMS at once.

A large stock of **Cabbage Plants** for Spring trade. **White Potato Onions,** etc. Address,

CLEVELAND NURSERY CO.,
RIO VISTA, VA

We carry the Largest and Most Complete Stock of

NURSERYMEN'S TOOLS AND SUPPLIES

IN THE COUNTRY.

Complete illustrated Catalogue and Price-List mailed on application.

WEAVER, PALMER & RICHMOND,
ROCHESTER, N. Y.

Mazzard and Mahaleb Cherry, Myrobolan Plum.

ALL ABOVE SEEDS STRATIFIED IN SAND.

FRENCH CRAB and PEAR. NATIVE APPLE.

OF VERY BEST QUALITY.

Prices and samples free. ***THOMAS MEEHAN & SONS,***
Germantown, Phila.

Gilbert Costich, Rochester, N. Y.

SURPLUS FOR SPRING, 1894.

Apple, Cherry, Dwarf Pear and Plum, Evergreens, Ornamental Trees, Etc.

W. T. HOOD & CO.,

(Old Dominion Nurseries.)

RICHMOND - - - - - VA.

250 ACRES IN NURSERIES.

A Full Line of Fruit and Ornamental Trees, Shrubs, Etc.

200,000 Peach, (Budded on Natural Stocks.)
100,000 Japan Pear Seedlings.
100,000 Apple "
50,000 Mariana Plum stocks.
50,000 Concord Grapes, 2 years.
10,000 Mulberries—Downing, Hicks, New American.

PEACH SEED.—Seed from the wild fruit of the mountains of East Tennesee and Western North Carolina, where "Yellows" and other diseases of the Peach are not known. Can dig in the Fall, beginning about Sept. 20th. In the Spring any time after Feb. 1st. **Having a Large Cool Storage Cellar,** we can dig early in the Spring and make shipment as necessary and avoid risk of winter storage.

FREIGHTS LOW. **TRUNK LINES "RUSH" OUR TREES.**

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Nursery Business For Sale.

In one of the best towns in Kansas. Doing a good business. A small cash payment required. Only cost you a postal card for particulars. Address NATIONAL NURSERYMAN,
Rochester, N. Y.

▲▲ *Asparagus Roots.* ▲▲

FIVE BEST KINDS.

Elmira and Columbia White. **Write for Wants to**

I. & J. L. LEONARD, IONA. N. J.

WANTED.—A list of varieties and prices of 4 to 5 feet Surplus Stock; also 50,000 Grapes.

CORNING NURSERY CO.,
CORNING, IOWA.



THE NORTH STAR CURRANT.

Plate No. 1,

Copyrighted by the JEWELL NURSERY CO.,
LAKE CITY, MINN

OVER.

THE NORTH STAR CURRANT.

AMERICA has originated but three Red Currants. We are indebted to Europe for all the other varieties in general cultivation. THE NORTH STAR is distinctly an American production. It is propagated in the extreme cold climate of Minnesota, where it has been carefully tested in every conceivable manner, and is now offered as a candidate for public favor in full confidence that it has many excellent qualities not possessed by any other Red Currant.

The fruit is very uniform in size, bright red, larger than the Red Dutch or Victoria, and rivalling the Cherry Currant, while each bush will yield double the quantity of fruit. It is less acid, much sweeter, and very agreeable to eat out of hand or for table use. The bunches are from four to six inches long, and densely packed with fruit, involving only half the labor in harvesting the crop. The berries cling to the branches long after the fruit is ripe and do not shell or drop off. This habit lengthens the season of this currant from four to six weeks. It is an early and prolific bearer, producing twenty-five per cent. more fruit than the common sorts. It is never affected by borers or other insect enemies.

THE NORTH STAR has a bright, healthy foliage, not too dense, which it retains very late in the fall, thus aiding to develop the strongest possible fruit buds. Its strong, rapid growth makes it particularly adapted for cultivation in the TREE FORM, as it requires but little pruning. It is the most desirable variety known for propagation as a TREE CURRANT.

The points that commend THE NORTH STAR particularly to the Nurseryman are :

1st. Its extreme vigor and hardiness. It will grow in ANY climate.

2nd. Its rapid growth, insuring a large proportion of heavy plants at an early age.

3rd. It propagates equally well from layers or cuttings, as it "catches" readily.

4th. It has more STRONG SELLING POINTS than any other currant we know.

We conscientiously believe it the BEST currant in existence to-day.

TESTIMONIALS OF ACTUAL GROWERS.

SPRINGFIELD, Mass., July 16th.

Our plants have produced several bushels in such quantities and quality that we are more than ever pleased with them. Merchants have come to the nursery for them, paying us from 10 to 12 cents per quart, and we have had to refuse many orders. Very truly yours, J. W, ADAMS & CO.

LUCAS CO., Ohio

I have raised an average of six quarts to each bush, or three hundred and twenty bushels per acre and sold them at $2.50 per bushel. W. W. FARNSWORTH.

PAINESVILLE, Ohio, Aug. 5, 1891.

GENTLEMEN.—The plants of the "North Star" you sent us last spring have made a very vigorous growth so far and promises to be one of the best we have. Yours truly, STORRS & HARRISON CO.

NEBRASKA STATE EXPERIMENTAL STATION, Tecumseh, Neb , W. R. HARRIS, Mgr. : The North Star Currant on my grounds has made a good growth and had a few bunches of currants on it this year. I am well pleased with it so far in growth and fruit.

HAMPTON. Iowa, Dec. 2, 1893.

I have fruited the "North Star" and it is very satisfactory.—J. C. FERRIS, Nurseryman.

FAIRVIEW NURSERIES, LANCASTER, Pa., Dec. 11, 1893.

I got two plants of the North Star Currant in the fall of 1891 and I find it is an immense bearer, good size, and of the best quality. Am sorry I did not get more at that time. Respectfully yours, DANIEL D. HERR.

REPORT OF THE MASSACHUSETTS STATE FRUIT COMMITTEE, 1891, ROBERT MANNING BURTON, Chairman : It is very productive and of excellent flavor ; indeed it is the best of the Red Currants.

THE NORTH STAR readily retails for $5.00 per dozen.

TERMS, WHOLESALE PRICES, ETC., will be submitted on application. Elegant colored lithograph plates furnished FREE for Agent's Plate Books. Generous terms will be extended to parties desiring colored plates for use in catalogues, and all communications will receive prompt and courteous attention.

Very truly yours,

THE JEWELL NURSERY CO.

J. Cole Doughty, Sec'y.

LAKE CITY, MINNESOTA, Jan. 1st, 1894.

Cayuga Nurseries.

We would call particular attention to our **Surplus of Currants, Gooseberries, Blackberries, Raspberries, Plums, Cherries, Apples, Dwf. Pears; O. L. Mt. Ash,** 4 to 8 ft.; **C. L. Wpg. Birch,** 5 to 8 ft.; **Paul's Thorn,** scarlet and white, 3 to 4 ft.; **Wier's C. L. Maple, Rose Mary Willow** and **Weedsport Prune.** Also a complete line of IMPORTED FRUIT TREE STOCKS, ready for delivery from our cellars early in Jan., '94. *Specialty, Superior Grading.*

WILEY & CO., Cayuga, N. Y.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

· SPRING OF 1894. ·

All Young and Thrifty and First Class In Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
4,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, Strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.
100 lbs. " " " **Seed** from plants raised of seed obtained from the originator of this variety.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

WILLOWDALE, RAKESTRAW & PYLE, **Chester Co., Pa.**

Geneva Nurseries.

YOUNGERS & CO., Props.,
. . GENEVA, NEB . .

WE HAVE A LARGE SURPLUS OF

· SHADE TREES. ·

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. **YOUNGERS & CO., Geneva, Neb.**

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, France.

A general assortment of **Fruit Tree Stocks,** such as **Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc.** The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, New York.

Knox Nurseries.

Established in 1851

300,000 Two-year old Apple Trees, 4 to 5 and 5 to 6 feet at panic prices.

150,000 Ben Davis.

H. M. Simpson Co.,

Vincennes, Ind.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,

ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR
UNITED STATES AND CANADA. ❋ ❋ ❋

ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK.

No Trees are better, nor did we ever offer a larger General Stock—one item being several million Whole Root apple,. Buyers who have been disappointed in Western trees because of poor roots (1 inch pieces are grafted by some), lack of care in digging, &c., will like ours; we use No. 1 stocks, shortened to 8 inches, the finished grafts 12 inches long. Free packing. Free extra count—10 per cent. Free Freight. Stark Bro's, Louisiana, Mo.

e.f.i.

Transon Bros.' Nurseries,

BARBIER BROS. & SON, Successors.

Nurseries : ORLEANS, (FRANCE.)

BEG TO OFFER SEVERAL MILLIONS OF

Mirobolan Stocks.

OUR CATALOGUE containing wholesale prices of all fruit tree stocks and extensive list of fruit trees, Hardy Ornamental plants, Climbers, the hardiest and best Conifers, Roses on own roots or grafted, and NOVELTIES in these kinds; also small Conifers, Deciduous and Evergreen Ornamental Trees, one and two years' seedlings, most useful for nurserymen, may be had free on application to

Messrs. Knauth, Nachod, & Kühne, 5 AND 7 WILLIAM STREET, NEW YORK.

John Waterer & Sons, Lt'd,

NURSERYMEN,

BAGSHOT, ENGLAND.

RHODODENDRONS AND OTHER HARDY EVERGREENS.

Correspondence solicited.

Berlin Nurseries.

WHOLESALE AND RETAIL

1,999,999 Strawberry Plants.
500,000 Asparagus Roots, (2 years.)
100,000 June Budded Peach Trees.

CATALOGUE FREE. J. G. HARRISON & SONS, BERLIN, Worcester Co., Md.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots. Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows . . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . . HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WE are still in the market with our **Dry Baled Moss**, and at prices to correspond with the hard times. We are in need of Apples, Plums and Cherries in exchange. Also have a a good stock of Dwarf Juneberry and High Bush Cranberry in cellar for early shipment.

Z. K. JEWETT & CO., Sparta, Wis.

---

600 ACRES. ESTABLISHED 1852. 13 GREENHOUSES.

PHOENIX NURSERY COMPANY.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

Nurserymen and Florists, Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. **BLOOMINGTON, ILL.**

C. F. McNAIR & CO.

DANSVILLE, N. Y.,

Growers of Fine Fruit Trees.

A LARGE STOCK OF STANDARD APPLES IN SURPLUS FOR SPRING.

Apple Scions in Large Assortment.

WRITE US FOR PRICES, ETC.

Correspondence Solicited.

Norway Maples, Golden Queen Raspberries,
Carolina Poplars, Peach Trees,
Osage Orange, Asparagus Roots, BARR'S and CONOVER'S

All my own growing, at moderate prices.

JOSIAH A. ROBERTS, Malvern, Chester Co., Pa.

JOHN PALMER & SON, LTD.,
NURSERYMEN,
ANNAN, Dumfriesshire, Scotland.

The oldest Exporters from this country to America, of a general assortment of Nursery Stock, including Millions of Seedling and Transplanted Evergreens, Forest and Ornamental Trees, Evergreens, and Shrubs, such as Norway Spruce, Austrian and Scotch Pines, Balsam, Fir, Norway Maples, Mountain Ash, Scotch Larch, Birch, and Elms, European Linden and Beech, also Industry, Crown Bob, Whitesmith, and Lancashire Lad Gooseberries, the finest and hardiest varieties of Hybrid Grafted Rhododendrons, Clematis and H. P. Roses, in large quantities and of best quality. ☞ Prices Very Low. Lowest through rates from Annan to all points in United States and Canada. Catalogues free. Correspondence and Early Orders Solicited.

Raspberry Plants for Spring of '94.

50,000 Early Ohio, 25,000 Gregg, 15,000 Souhegan
10,000 Tyler and 10,000 Palmer.

J. W. COGDALL, Springfield, Ill.

A Big Lot of **Hardy Ornamental Shrubs, Vines and Plants,** must be sold by Spring of 1894 to clear leased land. Cheapest! Send for Surplus Price List.

B. P. HANAN, Proprietor of the Arlington Nursery, **Arlington, Reno Co., Kans.**

This Page is always Wide Awake

and Bound to interest you if you're a Buyer.

* * * * * * * *

SPRING TIME!

PLAYING FOR YOUR TRADE.



CAN'T U USE SOME OF THE KINDS NAMED BELOW?

FRUIT TREES.

Plums, Standard and Dwarf Pears and Apples. General assortment of 1st class and § stock.

ORNAMENTAL TREES.

Catalpa; Linden, European; Maple, Ash Leaf, Silver Leaf and Weir's Cut Leaf; Mountain Ash, Oak Leaf.

HEDGING.

Honey Locust, strong, vigorous plants; extra fine.

SHRUBS, ETC.

Carnations, Chrysanthemums, Chinese Matrimony Vines, Hardy Azalea.

ROSES.

General assortment of Hybrids, Teas, etc., all grown on own roots.

BROWN BROTHERS COMPANY,

CONTINENTAL NURSERIES,

ROCHESTER, N. Y.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

THE NATIONAL NURSERYMAN

Office of
EXPERIMENT STATIONS
Rec'd 04 03 14
Answ'd

March, 1894.

Painesville Nurseries.

40th Year. 1,000 Acres. 28 Greenhouses.

Some extra fine Imported Stock, on which we can make low rates; strong, bushy, well furnished stuff; plenty of flower buds; altogether the best plants have ever handled.

Hardy Azaleas.—Mollis and Ghent; seedlings and named varieties.

Chinese Azaleas.—9 to 11 inch heads, bushy and clean; choice assortment best named kinds for forcing.

Rhododendrons.—Fine selection best named hardy and Catawbiense hybrids. 15 to 18 and 18 to 24 inches.

Tree Roses.—**Holland Stock,** in fine condition.

In cold storage cellars for spring delivery, the largest and most complete stock in the United States. Orders booked now and set aside in cellar ready for shipment any time wanted.

Fruit Trees.

All the leading varieties, especially fine lots of Standard Pears, Dwarf Pears, Plums, Apricots, Nectarines, Mulberries, etc.

Small Fruits.—The largest and best assortment, carefully dug and graded, pure stock.

Grape Vines.—Immense stock No. 1, one and two years, splendidly rooted.

Nut Trees.—Headquarters for Chestnuts, American and Japan; Butternuts, Black and Japan Walnuts, Shell-bark Hickories, Filberts, Pecans, etc.

Ornamentals.

We lead in this department. Largest and best stock for spring '94 have ever carried. Call attention to extra fine blocks of

Willows. — Wisconsin, Babylonica, Laurel-leaved, Gold-barked, Killmarnock and New American.

Poplars.—Carolina, Lombardy, Balsam, Aurea and Pyramidal.

Maples.—Silver, Wier's cut-leaved, Norway and Ash-leaved.

Flowering Thorns. — White, Pink and Paul's scarlet.

Tea's Weeping Mulberry, Young's Weeping Birch, White-leaf Weeping Linden, Imperial Cut-leaf Alder, White Ash, Scotch Birch, Purple Beech, Elms, Horse Chestnuts, Magnolias, Salisburia, Rose-acacia, European Euonymous, Tulip trees, etc.

Evergreen Trees and Shrubs

One of the best collections of **Hardy Bulbs, Shrubs, Climbing Vines and Plants.**

75,000 Roses.

Strong, field grown Hybrid Perpetuals, Mosses and Climbers, clean and thrifty; no better lot in the country.

Seeds.—**Flower and Vegetable.**—The best tested stocks at lowest rates.

Always open to inspection. Come and see.

No trouble to estimate on your list of wants. Spring Catalogue and Trade List FREE. Ready in January.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

Ellwanger & Barry

Mt Hope Nurseries

FOUNDED 1840.

ROCHESTER, N. Y.

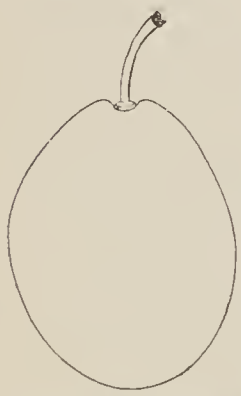
LEADING SPECIALTIES SPRING 1894.

STANDARD PEARS.
DWARF DUCHESSE.
CONCORD GRAPES.
CUTHBERT RASPBERRIES.
GOLDEN QUEEN RASPBERRIES.
AMERICAN CHESTNUTS.
BLACK WALNUTS.
CATALPAS.
DOUBLE-FLOWERED THORNS.
HORSE CHESTNUTS.
NORWAY AND WHITE SPRUCE.
ARBOR VITÆ, Pyramidal, American Hovey's Compacta, Globosa.
HARDY FLOWERING SHRUBS,
HARDY ROSES.

AND A COMPLETE LINE OF GENERAL NURSERY STOCK.

CATALOGUES FREE. ESTIMATES FURNISHED.

WILSON, JR., AND OTHER BLACKBERRIES, 100,000.
OUR PLUM ON PEACH ARE AS FINE AS WE HAVE SEEN.



PEACH, ONLY 3-4 FT. BUT CALIPER EXCELLENT. **CHERRY**, MOSTLY SWEETS, LARGE ASSORTMENT. The following are all first-class: **APRICOT, FLEMISH** and **CLAPP'S STD., DUCHESS DWF., CRAB,** and **BLOOD-LEAF PEACH; N. SPRUCE,** 3 times transplanted, extra fine. **BOX ELDER, CATALPA, ELM, ETC.** Our "treated" **MARIANA CUTTINGS** will make stocks to bud in August. **PEACH PITS** "for nothing." Get Sample. **BRANCHED APPLE** Stocks for budding. **CAREFULLY MADE GRAFTS.**

PRICES AND QUALITY WILL PLEASE YOU.

SPAULDING NURSERY AND ORCHARD CO., SPAULDING, ILL. NEAR SPRINGFIELD.

In addition to the fine Cut-leaf Weeping Birch offered last month, I have a good assortment of Plums, first-class medium and half inch; also 5,000 dwarf Duchess Pear, 2 and 3 years; a few hundred Seckel and Clapp's Favorite standard Pear, 1 inch and over, 7 to 9 feet; standard Pear ¾ and ⅝; few thousand No. 2 and No. 3 Peach, plenty of Elberta in the lot; few Mountain and Oak-leaved Ash, and about 2,000 roses.

This stock was raised to sell, and is going to be sold. Prices given with pleasure.

JAY WOOD,
KNOWLESVILLE, N. Y.

LOOK! LOOK! LOOK! LOOK!

ROSES! ROSES! ROSES!

HYBRID PERPETUALS, MOSSES AND CLIMBERS.

STRONG TWO-YEAR-OLD PLANTS! OUT-DOOR GROWN!

ON OWN ROOTS, except some of the mosses and certain other varieties, which it is very difficult or impossible to grow from cuttings. These are low budded, on Manetti stocks, and free from suckers.

ALL FINEST VARIETIES.

Ætna Moss, *dark pink*,
Alfred Colomb, *crimson*,
American Beauty, *deep pink*,
Anne de Diesbach, *carmine*,
Baltimore Belle, *cl. blush white*,
Baroness Rothschild, *pink*,
Blanche Moreau, moss, *white*,
Blanche Robert, moss, *white*,
Caroline de Sansel, *flesh*,
Caroline Marniesse, *creamy white*,
Cl. Victor Verdier, *rose*,
Cl. Jules Margottin, *carmine*,
Coquette des Alpes, *white*,
Coquette des Blanches, *pure white*,
Crimson Globe, moss,
Fairy Queen, *white*,
Fisher Holmes, *crimson*,
Gen. Jacqueminot, *crimson*,
Gen. Washington, *red*,
Gloire de Margottin, *crimson*,
Gracilis, moss, *deep pink*,
Henry Martin, moss, *pink*,
Jules Margottin, *red*,
Madame Gabriel Luizet, *pink*,
Madam Plantier, *white*,
Magna Charta, *pink*,
Marguerite de St. Amande, *rose*,
Maurice Bernardin, *crimson*,
Paul Neyron, *deep rose*,
Persian Yellow, *golden*,
Pierre Notting, *deep maroon*,
Prince Camille de Rohan, *crimson*,
Princess Adelaide, moss, *pale rose*,
Queen of the Prairie, cl., *red*,
Salet, moss, *light rose*.

EMPRESS OF CHINA—Our new perpetual blooming climber. To dealers who will make this valuable new variety a specialty with their agents we will furnish plates free of charge. Send for description.

We also have all the choice varieties in other lines. CLEMATIS, ORNAMENTAL SHRUBS and TREES, GRAPES, etc., etc.

All our stock is now stored in our cellars and so we can promise as early shipment as is desired. Write for our prices. We want your trade and will make them right.

JACKSON & PERKINS,

NEWARK, WAYNE CO., NEW YORK.

SEND US YOUR WANT AND SURPLUS LISTS.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing*.

Send for Price-list and Circulars.

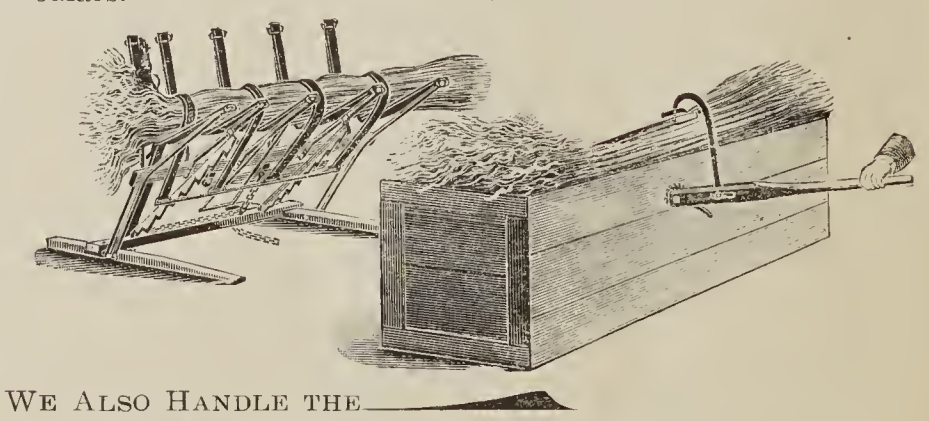
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp.

It is *simple* to use as a *cant hook*. Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Bales, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

Apple Trees.

Carolina Poplars.

At very low prices on account of clearing a rented field. Can supply them in large quantities. Also a large assortment of General Nursery Stock. . . . .

GEORGE ACHELIS,

WEST CHESTER, CHESTER CO., PA.

HOFFMAN NURSERIES.

We Have in Surplus for Spring of 1894

Standard Apples, Pears, Plums,

AND A LARGE LIST OF

ORNAMENTAL

SHRUBS AND TREES.

ALL GOOD STOCK.

WILL BE PLEASED TO QUOTE SIZES AND PRICES OF VARIETIES.

PLEASE SEND US YOUR LIST OF WANTS

E. M. & H. N. HOFFMAN,

ELMIRA, N. Y.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

Clematis.—Strong plants. Holland and own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh: Fortunii; John Gould Veitch; Lucie Lemoine; Crispa: Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.

Honeysuckle.—Hall's Japan, Monthly Fragrant.

Ampelopsis Veitchii. American Ivy.

Japan Snowball.—Strong, fine plants.

Roses, H. P's and Mosses.—Strong plants, own roots and budded.

Tea Roses.—Fine plants, 4 inch pots.

Tree Roses.—Elegant plants. Lowest price in America.

Oak-leaf Mt. Ash.—Elegant trees. Low price.

Cut-leaf Birch.—8 feet, perfect trees.

Purple Birch.—4 feet, **true purpurea.**

Young's Weeping Birch.—5 feet stems.

Lilac, Weeping Pendula.—5 feet, not budded on lilac.

Hydrangea P. G.—A fine lot of strong plants.

Flowering and Foliage Shrubs.—Fine assortment.

Paeonies.—A grand collection.

Paeonies, Tree.—Nice plants in quantity.

Industry Gooseberries.—3 years. Plants matchless.

Blackberries.—Strong, nicely trimmed to one cane.

Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry.

Grape Vines.—A complete assortment.

Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

Baltimore and Richmond Nurseries.

Japan Pear Seedlings . . .

Are the best stock for all sections. They do well on both light and heavy soils. Order a few thousand and be convinced. We use no others. Prices low in quantity. Quotations given on application.

WE WILL EXCHANGE SEEDLINGS FOR SUCH STOCK AS WE CAN USE SPRING OR FALL 1894, SEND SURPLUS LIST.

Peach Pits. . . . . .

We have a few Smock Pits of last season's crop, and can offer low to close them out.

OUR ARRANGEMENTS FOR THIS SEASON WILL INSURE A GOOD LOT OF THE FOLLOWING:

Smock, Southern Naturals, Promiscuous,

GET OUR PRICES BEFORE PLACING YOUR ORDER.

We are Wholesale Growers of a . . General Line of Nursery Stock and Invite Correspondence. . . . .

Franklin Davis Nursery Co.,

BALTIMORE, MD.

South St. Louis Nurseries,

WHOLESALE GROWERS, GENERAL STOCK.

Standard and Dwarf Pears, 100,000 trees, 2 years old, handsome, thrifty trees, well-rooted; the only home grown stock in the west.

Cherries, 2 years old, heavy grades.

European Plum on Plum, 2 years old, first-class, light first-class and medium grades.

Roses, own roots; strong 2 years field-grown bushes; Hybrid Perpetuals, Climbing and Moss.

Shrubs, large bushy plants; Hydrangeas, Calycanthus, Lilacs, Honeysuckles, Fringes, Weigelias, Snowballs, etc.

Cut-leaved Weeping Birch, 4 to 5 ft., 5 to 6 ft., 6 to 7 ft.

Lowest possible prices for early orders.

Car lots a specialty.

Price-list mailed after Feb. 1. Send for one.

S. M. BAYLES,

Station "B," St. Louis, Mo.

Stake Labels

FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	inch;	1 1-2	x	5-16	inch.
18	"	1 1-2	x	1-2	"
21	"	1 3-4	x	3-4	"
24	"	2	x	3-4	"
27	"	2 1-2	x	7-8	"
30	"	3	x	7-8	"

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. Samples Free.

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

SYRACUSE NURSERIES AND "LAKESIDE" STOCK FARM.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Cherries.

A very fine line of

Ornamental Trees and Shrubs,

suitable for LAWNS and PARKS, and a very large, exceptionally choice list of

Roses.

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

-OUR-

Live Stock Department

Is replete with HORSES and CATTLE of all ages and both sexes, of the following breeds:

STANDARD BRED,

FRENCH AND AMERICAN COACH,

CLEVELAND BAY,

HACKNEY,

CLYDESDALE,

PERCHERON,

and Driving, Coach or Carriage Horses, single or in pairs.

-ALSO-

Holstein Friesian Cattle

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

THE SMITHS & POWELL CO., Syracuse, N. Y.

1838. 56 Years. 300 Acres. **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, Matrimony Vines, Trifoliate Orange, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries and Wineberries, Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES,

WILLIAM PARRY, PARRY, N. J.



A CROSS OF JOHNSON'S LATE BY SHARPLESS.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

VOL. II. ROCHESTER, N. Y., MARCH, 1894. NO. 2.

ARE NOVELTIES WORTH THEIR COST?

Professor L. H. Bailey, of Cornell University, read the following paper, entitled, "Are Novelties Worth Their Cost?" before the W. N. Y. Horticultural Society:

"It is a perennial question, this asking if novelties pay, and yet it is never settled. The manner of answering the question seems always to be the same: The respondent cites his own experience with the new varieties, with an inclination to dwell most upon those which he considers to be dishonest or unworthy; and so it comes that there are as many opinions of the 'novelty question'—as the discussion has come to be called—as there are persons who try to answer it, with a tendency, always, to decry the introduction of new things. It is evident that the fundamental merits of the question can never be determined from individual experience of a certain number of novelties, for it is rare if any two experiences agree upon even the same variety. If there is not some broader scientific basis of judgment, the question may as well be dropped forever.

"What we really need to ask is this: Is there a constant tendency for new varieties to surpass the old? Or, in other words, have we reached the limit of improvement and evolution in any species of plant? Before attempting a direct answer to these questions, we shall need to consider for a moment if varieties are pre-limited in duration or if they 'run out,' for if they do pass away, new varieties must take their places, or the cultivated type of the species would cease to exist. Or, to state the proposition differently, if varieties run out, the species can be rescued from oblivion only by new forms; but inasmuch as all valuable cultivated plants constantly tend to increase in extent of cultivation, it follows either that they do not run out, or that new varieties are better than the old and drive them out. And yet there are persons who hold tenaciously to both dogmas—that varieties run out and that novelties do not pay—without seeing the logical result of such opinion is to drive the cultivated flora from the face of the earth. Now it is true that the varities of any plant are, as a whole, constantly changing, as one may prove by comparing the catalogues and manuals of a generation ago with those of to-day. These changes are most rapid in plants of shortest duration, or those in which there has been the greatest number of generations, showing that the greater the opportunity for renewal of stock the greater is the variation and number of recorded varieties. Thus the apples of to-day are as much like those of a century ago as the strawberries of to-day are like those of ten years ago, and there is about the same number of generations in the one case as in the other. This means, as I said before, that the rate of change in named varieties is in proportion to the length of life or profitable duration of the species. This at once raises a strong presumption that varieties do not wear out from mere age, but that they pass out in the process of reproduction or regeneration; and as varieties of standard merit are more numerous in all plants now than they were a century or even a human generation ago, it must follow that new varieties have been appearing all these years which were good enough to obtain the confidence of all careful growers. In two papers which I have presented to this society, I have shown, I think, that varieties do not wear out; but all plants which are habitually propagated by seeds, as garden vegetables and flowers, tend constantly to change or differ from their parents and finally to pass so far away from them that they receive new names, and plants which are propagated from cuttings of abnormally developed parts, as the potato, constantly tend to deteriorate unless grown and selected under the very best conditions; but all plants propagated from normal or unvariable parts, as by ordinary cuttings, scions and layers, remain substantially the same from century to century, as it is the actual case in several prominent orchard fruits. If the orchard fruits do not run out, therefore, the only reason why the varieties should change is because better ones appear and drive them out; and inasmuch as it is a matter of common knowledge that change does take place, it follows that profitable novelties have appeared.

"Up to this time, therefore, novelties, or at least many of them, have paid. Is there any reason for supposing that they will not pay equally well in the future? Or, to raise my original question, is profitable variation no longer possible? This question is not new and there is no special reason for asking it at the present time. It is certainly as old as commercial horticulture; and, for all I know, Noah, when driving the animals into the ark, may have asked if so many varieties paid. If novelties have furnished all advancement up to the present time, it would seem that they must continue doing so in the future, and the only reason for discussing the question at all must be a prevalent belief that varieties are now so many and so good that the limit of profitable evolution has been reached.

"I have said that all advancement in types of cultivated plants has come about through the origination and introduction of new forms. It is necessary, then, that this advancement be defined. A novelty does not necessarily need to surpass every or even any old variety in order that it may

have merit. It may possess attributes which fit it for some entirely new condition or use. A currant or gooseberry which is sweet and tender enough to supply the dessert may be a useful novelty, while in all other respects it may be inferior to all existing varieties. And this is a point that we should keep constantly in mind — that we need new varieties for unfilled gaps, for new regions, various soils, new markets and new household uses. If, therefore, a variety is successful, or profitable, with one person only, and fails with others, it is worth introducing. The trouble is not so much that novelties are unworthy as it is that they are recommended promiscuously and that their particular and distinctive merits are not discovered. Now, I like to think that the evolution of cultivated varieties follows the same laws as the evolution of new types in nature; and it is pretty well agreed by all naturalists that there are more distinct species or forms upon the earth to-day than there have been at any one previous time. We are apt to think that both the animal and vegetable kingdoms have passed the zenith of their development, because the greater number of monstrous forms are extinct. There were giants in those days. But size or bulk is not a measure of the height of development. Evolution is perfected only when every phrase and condition of external world has some type of life particularily adapted to it, and inasmuch as new conditions in the physical features of the globe are constantly appearing, there must be a constantly progressing attempt on the part of animals and plants to adapt themselves to these new conditions. The surface of the earth was probably never so varied in physical characters as at the present time, and it is safe to assume — particularily as such facts as are known support the assumption — that there have never been so many diverse forms of life upon the globe as at present, and this differentiation is proceeding as rapidly to-day, probably, as it has at any time in the past. In other words, the only limit to the expansion and evolution of wild plants is that of the surroundings in which they live; and as cultivated plants modify themselves through the same laws, it must follow that there is no predetermined limit to their amelioration or improvement, so long as a man continues to cultivate and modify the earth. Every year may witness better varieties, until the plant becomes so unlike its ancestors that its parentage may be lost or unrecognized, and new specific forms even may originate under the hand of man, and this has actually occurred in many instances.

If philosophy teaches us that there is no set or predetermined limit beyond which plants may not progress, reflection must likewise convince every one of us of the essential truth of the same proposition. We know that most important cultivated plants have come from a very inferior ancestry, and some, if not most, fruits have sprung from parents which are scarcely edible to civilized tastes. And we have a graphic means of comparing the improved, side by side, with inferior types in the small-leaved, small and sureoat-fruited and often weak and tender "crabs" and other seedlings, which, however, are only partially reverted to their aboriginal condition. And in America, where vast new regions have been settled with great rapidity, we have seen the extension of fruit growing by means of new and adaptive varieties into regions which were thought to be unfitted for such purposes but a few years ago. It is a fact that all plants, especially our fruits, have responded with remarkable facility to all the new demands which our markets and soils and climatic limitations have placed upon them. This response has been in the way of new varieties, and it has, of course, been most marked in those fruits which were comparatively little developed and to which almost every condition of cultivation and dissemination was new. You will recall the readiness with which the native plums, within forty years, have given us nearly two hundred varieties adapted to a remarkable range of conditions and uses; and the blackberries and raspberries within a generation have given results which show that they will equal, if, indeed, they do not eclipse the wonderful evolution of native grapes within a century, and many of you will recall the fact that it is less than a generation ago when it was thought that roses could not be successfully grown out of doors in this country. Evolution, therefore, undoubtedly becomes slower the more the plant is improved, for it has constantly to compete with its own progress, but if worthy new varieties are less frequent in the old standard fruits, it does not follow that there are none.

I assert, therefore, that the tendency to produce new varieties is the means by which cultivated plants are ever more and more improved and fitted into new conditions and uses, and novelties must pay if horticulture is to forever pay. But not all novelties pay, and the reasons must be apparent. They may not be good enough to pay. Novelties are introduced both hastily and indiscreetly. If the philosophy of the question, as we have considered it, teaches us anything, it is: (1) That the older and more improved the type the less the chances of securing a worthy novelty; (2) That there is most use for novelties in those plants which are propogated by seeds and by abnormally developed parts, because such plants usually quickly run out by variation; (3) That worthy novelties appear less frequently in old regions than in new ones, because of greater competition of established varieties there; and, (4) That the merit of a variety lies in its adaptibility to some particular use or demand. I therefore look with caution upon novelties in the old standard fruits and in the old horticultural regions, the more especially as these fruits are propogated by buds, and the good old varieties remain with us; and I look with suspicion upon all those which are recommended indiscriminately, indefinitely, generally, and for everything and equally for all regions, because their descriptions cannot be truthful and cannot be founded upon experience. I believe that the time is now at hand when a man can establish a more lucrative nursery or plant business by giving his novelties careful and discriminating tests and by telling what they are

not good for as clearly as he tells what they are good for, as he can by possessing himself of the desire to introduce a certain number of novelties each year and to plant them in such faultless colors that every thoughtful man knows that they are false.

CENTURY PLANT TO BLOSSOM.

A century plant, *agave Americana variegata*, in the greenhouse of W. Austin Wadsworth, at Geneseo, N. Y., is preparing to blossom. Much interest was taken when the century plant belonging to Edward A. Frost, the well-known nurseryman, of Rochester, bloomed twenty-five years ago. Mr. Frost thus describes the plant at Geneseo, which he saw a few days ago:

"The plant has been in the possession of the Wadsworth family over fifty years and originally came from John Greir, of Canandaigua. The first indication of its flowering was discovered January 20th and its daily growth has averaged about 3½ inches since that time. The plant has about forty leaves, and the huge asparagus-like flower shoot or stalk starts from the center. The large box in which it grows has been sunk in the ground on a level with the floor of the green-house and the flower stem has now reached the height of eleven feet and nine inches from the ground. The roof of the green-house has been removed. A tower or cupola of glass about seven feet square and twenty feet in height has been erected to allow the flower shoot plenty of room for upward growth. This large flower shoot is fully five inches in diameter where it leaves the heart of the plant, and from its present indications will probably reach twenty feet. At about the height of ten feet there are buds behind the sheath on the side of the stalk, which will form a side shoot or arm, extending outward in a curved, graceful, candelabra form, about two feet in length; and other arms fifteen or twenty, will be thrown out as its growth continues, and at the termini of each arm there will be a cluster of flowers about the size of a crocus blossom, measuring several inches across, with over fifty flowers in each cluster. The largest cluster or bunch will be the center, or the last one to come, at the extreme top. The first to blossom will be on the first arm that comes, and the last to blossom will be the one at the top."

In the horticultural department of the Midwinter Fair in California there will be held in April a series of fruit conventions. Horticulturists throughout the world will be invited to participate in these congresses. Emory E. Smith is chief of the horticultural department.

A large sized boom in apple tree planting in Oregon is likely to result from its fine exhibition at the World's Fair. California should have more good orchards of the best winter apples.—*California Fruit Grower.*

LATE MARKET STRAWBERRY.

A recent bulletin of the New York Agricultural Experiment Station, Dr. Peter Collier, director, refers to experiments with strawberries. Regarding the demand for a late market strawberry the bulletin states: "A cross of Johnson's Late by Sharpless, is of interest in this connection, because it combines in itself some of the most valuable characters of each of its parents, thus indicating the possibilities of improvement by systematic breeding. Sharpless, the male parent, is well known as a vigorous grower with large, dark green, coarsely serrated leaves, large, bright scarlet fruit, rather variable in form, sometimes with unripe tips. The flesh is firm, light red, and of good quality. Fruit ripens mid-season to late. The other parent, Johnson's Late, a variety not commonly known, is, in some respects, a remarkable strawberry. It is a chance seedling sent here in 1885 by R. Johnson, of Shortsville, N. Y. Its fruiting season is one of the very latest among hundreds of varieties grown here during the last few years." The frontispiece of this issue illustrates this new variety which has not yet been thoroughly tested.

RESULTS OF SPRAYING.

A recent bulletin of the Cornell Experiment Station quotes the opinions of several practical fruit growers who strongly favor spraying orchards and says of the results of spraying: "The foliage of a tree, when kept healthy by spraying, persists longer and does better work, and this is seen in the size of the apples. The size of Fall Pippins was practically doubled by keeping the trees and fruit free from fungus. The increased health and vigor of the tree also intensifies the color of certain varieties, and the keeping qualities of the Fall Pippins and Maiden Blush were apparently augmented, and all these improvements were so evident that in the market the price of the sprayed apples over those not sprayed was increased on an average by $1 a barrel by the applications made during the season."

PRUNE RAISING IN OREGON.

Regarding a recent note to the effect that an Oregon nurseryman recently placed an order for 20,000 prune trees, J. H. Settlemier & Son of Woodburn, Ore., writes: "We frequently fill orders for as high as 50,000 trees to one dealer and have this year already sent out two orders for 30,000 trees apiece and several from 10,000 to 20,000 trees. The most of these go to California, to dealers, though we have sold as many as these to planters direct. Prune raising in Oregon has taken on sudden life within the past two or three years and in that time thousands of acres have been planted."

Among Growers and Dealers.

William Smith, of Geneva, has been visiting prominent western nursery firms.

The Cleveland Nursery Company, of Rio Vista, Va., is propagating 100 varieties of strawberries.

J. W. Smith and Ira E. Van Duzer, Winona, Ont., have dissolved partnership. Each continues the business alone.

W. P. Stark and Mr. Gatewood of the Stark Brothers Nurseries, Louisiana, Mo., passed a portion of the winter in the South.

The Puyallup-Yakima Washington Nursery has about 30 acres in trees, with a total of 170,000 grafted trees, besides small fruits. The sales reported last year amounts to about $100,000.

Charles S. Simpson, of Central Washington Nursery, at North Yakima, Washington, had 11 acres in trees and sold in the state last year 60,000 trees. He has a stock of 88,000 grafted trees and about 55,000 seedlings.

J. E. Medill, of the Excelsior Nursery, North Yakima Washington, has about 70,000 fine young trees ready for orchardists this season. His ground covers about 10 acres, and last year his sales were about 15,000 trees.

H. A. Jewett, of White Salmon, Washington, reports 40 acres in grafted trees, with about 120,000 grafted stock. Sales last year reached 100,000 trees. He strongly urges that a nurseryman's association be organized at once.

William C. Barry, of the firm of Ellwanger & Barry, favors the establishment of an experiment station for horticultural research in Western New York. A bill for such a station has been introduced in the legislature, appropriating $24,000 for a state horticultural department.

The C. W. Reed Nursery Company, of Sacramento, Cal., has been incorporated with a capital stock of $300,000. The directors are C. W. Reed and M. D. Reed, of Washington, Yolo County; S. R. Johnson, of San Jose, and W. M. Jenks and W. F. Barnes, of Sacramento.

The firm of Arthur Bryant & Sons, of Princeton, Ill., consisting of Arthur Bryant, H. G. Bryant and Guy A. Bryant has been dissolved by mutual consent. The business will be continued by Arthur Bryant and Guy A. Bryant under the firm name of Arthur Bryant & Son. H. G. Bryant has entered into partnership with B. E. Fields under the firm name of Fields & Bryant. They have purchased the Eureka Nurseries of Fremont, Nebraska, and intend to do business at that point.

Regarding the statement of the Ricker National Nursery Company, of Elgin, Ill., R. M. Ireland, assignee of the E. H. Ricker Company, of Elgin, says:

A circular and a catalogue have been issued by certain parties calling themselves "The Ricker National Nursery Co.," in which the statement is made that they have purchased the Elgin Nurseries, and which contain a cut or representation of the nurseries now in our hands. The only nurseries located in the city of Elgin are those in the hands of the assignee of the E. H. Ricker Co. The so-called "Ricker National Nursery Co." have not purchased these nurseries and have no nurseries here at all. These circulars and catalogue referred to are, in this respect, entirely fraudulent.

President E. F. Stephens, of the Ricker National Nursery Company makes this explanation:

I have known Mr. E. H. Ricker some eight or ten years. He started in a poor boy at the age of ten, and by hard work and good management he built up a good business. At the time that finances were so close last summer around Chicago, some Chicago parties for whom he had planted freely were unable to pay their notes. These notes had been discounted at his bank at Elgin. He had also borrowed some money at the bank. At a time when banks were also reaching for cover, the bank threatened to issue on judgment notes, which is the kind they use in Illinois, unless paid in three days. Mr. Ricker was unwisely stampeded thereby to make an assignment to an attorney whom he supposed to be his friend. This attorney invoiced the property at a low rate, at about $55,000; the total indebtedness at about $12,000. Quite a number of the creditors said to Mr. Ricker that they would take stock in a new company, if he would form one, to the amount of their claims. I think $8,000 of the $12,000 has been so placed. If the new company raises about $4,000, which they very quickly expect to do, the new company would pay off the debts of the old company and would acquire its property, valued at about $55,000, and the business would then be conducted under the style of the Ricker National Nursery Company. It is the understanding and the expectation that all this will be accomplished before the opening of the spring business and that the Ricker National Nursery Company will acquire the property of the old company and that Mr. Ireland, the assignee, will be out of the nursery business.

E. H. Ricker said: "A petition will be filed within a few days by a large number of the creditors, asking the removal of the assignee." The *Evergreen Grower* says in reply to a correspondent's inquiry: "The Ricker National Nursery Co. is solid; has a capital stock of $50,000 and no creditors; has made no assignment and will never have to. The Ricker National Nursery Co. hold claims against the E. H. Ricker Co. of over $8,000, and will no doubt purchase the entire plant when offered for sale. The article you saw under the heading, "Beware of Fraud," is an attempt to injure the Ricker National Nursery Co., by R. M. Ireland, who was a director and a controller of seventy-four per cent. of the $10,000 capital stock of the E. H. Ricker Co. The Ricker National Nursery Co. will fill orders at five per cent. less than any other firm or person in America."

WASHINGTON PROSPECTS.

Right here in the State of Washington exist all possibly natural conditions for a great diversity of fruit growing. An increased acreage to the amount 50,000 acres planted with fruit trees and properly cared for when in bearing will be worth over $15,000,000 annually to this state. Of the staple fruits we should plant soon as possible at least 10,000 acres cherries, 10,000 acres winter apples, 10,000 acres prunes and proportionate amounts of all other varieties. We shall then attract through markets and ship by train loads.—*Northwest Horticulturist.*

S. W. HOOVER.

S. W. Hoover was born in Montgomery County, Ohio, April 16, 1837, where he was reared and trained in farm-husbandry. He was afforded a district-school education common to the semi-pioneer days of Western Ohio. He early developed a love of nature, particularly as manifested in plant life, which had a peculiar fascination for him, leading him to engage more or less extensively in amateur propagation and planting at an early age, which experience, with no small degree of ambition, energy and an investigating and progressive turn of mind. seconded by a wide range of reading on the subject, fitted him for the active duties of an established nursery. In the spring of 1869, his long-cherished desire was gratified by his engagement with Kinsey & Gaines, nurserymen, located about nine miles north of Dayton, when he entered upon what proved to be an eminently successful career in the nursery business. Two and a half years later Mr. Hoover purchased Mr. Kinsey's interest, and became a partner under the firm name of Hoover & Gaines, and at once assumed charge of the office department of the business. The new firm leased the lands of Mr. Kinsey where the business was conducted until 1879, when it purchased the lands now occupied by The Hoover & Gaines Co., located in the northwestern suburbs of Dayton, to which the business was removed the same year. Mr. Hoover continued in charge of the office department, in which capacity he displayed an unusual degree of native genius, tact and enterprise.

In January, 1883, The Hoover & Gaines Co. was incorporated, and Mr. Hoover was unanimously chosen president; J. W. Gaines, his former partner is vice-president; and J. W. McNary, secretary and treasurer. They stand among the best and most reliable American nurserymen. Soon after the incorporation, Mr. Hoover was, at his own request, relieved from the more active duties of the business. A large public spirit and an ardent love for fruits and flowers led him to give liberal attention, talent and time to the promotion of the wider and more general interests of horticulture; practicularly as a member of the Montgomery County Horticultural Society, contributing information, endeavoring to cultivate a desire and taste for more extensive ornamentation and otherwise promoting the interests of the public good. He was one of the organizers of, and for a number of years has been more or less actively identified with the workings of the American Nurserymen's National, and American Nurserymen's Protective Associations, having served on the executive board of the former and as president of the latter. He is also president of the Mathias Planing Mill Co. of Dayton.

Besides these various temporal affairs, Mr. Hoover is extensively engaged in Christian work. He is a minister of the gospel, engaged in the active duties of this high calling with pastoral charge of a congregation of the denomination of Brethren (Baptists) in Dayton. He was chief promotor



S. W. HOOVER.

and is now at the head of this denomination's book and tract work, and is a member of the general missionary board of the church. Mr. Hoover is thoroughly practical in all he does. His strict discipline, genial social qualities, and high moral character eminently fit him for those several positions of honor and trust, and have won for him the esteem and confidence of hosts of admiring friends both at home and abroad.

NORTHWEST NURSERY ASSOCIATION.

The Northwest Nursery Association was organized at the Hotel Spokane, at Spokane Falls, Wash., on February 15th. C. L. Whitney of Walla Walla, Wash., was elected president, F. W. Settlemier of Woodburn, Ore., secretary, and T. L. Ragsdale, treasurer. Delegates were present from Idaho, Oregon, Washington and British Columbia. The object of the association is to promote the growth of trees and plants and to aid fruit growers in making their investment profitable. This is the first organization of the kind in the country. It differs materially from other nursery organizations. Much benefit is expected to accrue to the nursery trade and the fruit industry through its influence. Its motto is less stock and better stock.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months.....50
Foreign Subscriptions, in advance.....1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., MARCH, 1894.

EASTERN STOCK IN THE WEST.

The movement upon the part of Pacific coast states against the importation of trees from the eastern states because of danger from diseased stock has within a year made considerable progress. Horticulturists and nurserymen on the coast have become deeply interested in the subject. They are fully impressed with its importance and they are very much in earnest in their efforts to prevent a contamination of their stock by the means suggested. California has passed laws quarantining eastern nursery stock and the enforcement of the laws has been rigid. Washington has followed the same course and now an attempt is being made to bring Oregon into line. In a letter to the president of the Oregon State Board of Horticulture, the secretary of the Board of Horticultural Commissioners of San Bernardino county, California, said: "You are doubtless aware that California has been waging an active warfare against the introduction of the peach yellows. Our legislature, at its last session, passed an act empowering the state quarantine officer and the county horticultural commissioners to quarantine against diseases and insects. We have had but one active season and have barred thousands of trees; car after car has been held and destroyed or returned and many were not started on their journey by reason of countermanded orders. We realize that next season your market will be glutted with eastern trees, and an attempt or series of attempts will be made to ship them in here as Oregon-grown. We have always admitted trees from Oregon as freely as those grown in different parts of California; in some instances more freely. But there is a feeling growing daily stronger that unless your state takes active measures to protect yourselves against eastern trees, in self-defense we will have in California to take precautionary measures against eastern trees coming by way of your state. You are doubtless aware of the extent of country now devastated by the yellows and rosette. Dr. Smith's bulletin, issued by the agricultural department at Washington, states that our only safety lies in growing our own trees. If either or both of these deadly diseases once obtain a foothold on this coast, it is only a question of time when our peach, plum, prune, almond, nectarine and other fruit trees, on peach or plum roots will be wiped out. In my judgment there is no subject of such importance to the vital interests of the fruit-growers of this coast and they should stand shoulder to shoulder against the introduction of eastern-grown trees for fear of getting these dread diseases with them."

The question is: What are the nurserymen of the East going to do about it? In the first place Pacific coast horticulturists have a wrong impression of eastern nursery stock. This is said in no spirit of unjustifiable defense of eastern stock. It is a fact that on account of the climate of California and the coast states the ravages of insects and diseases among trees and shrubs are many times as great as they are in sections of the country where much of the year the weather is so severe as to completely banish these evils. It has been found necessary in California to import insects to kill insects, and the experience of California fruit growers coupled with their dependence upon the profits of fruit growing causes them to be sensitive on this subject. Only in certain sections of the East is there peach yellows—not at all, for instance, in Western New York. In this section the woolly aphis may appear at times, but it is speedily exterminated by spraying. In Delaware and New Jersey and in other sections the yellows appears and every effort is made to get rid of it.

Eastern nurserymen should take great precaution to preserve the reputation of their stock and should lose no opportunity to impress upon the minds of any who may be careless the importance of growing stock which, when dug, packed and delivered to the fruit growers of the Pacific coast shall challenge the severest scrutiny of the inspectors who meet it at the depots. The West is a great field for future fruit culture and no misapprehension regarding the value of nursery stock from any section should be allowed to exist.

GEORGE A. SWEET writes from Oakland, Cal., "I strongly favor nursery stock going on the free list. In fact the present law, as interpreted by the customs officials is about the worst that could be framed. My advices from Washington lead me to hope that it will be annulled at this session." This opinion is undoubtedly that of the majority

of nurserymen. Irving Rouse and William C. Barry would like to see a moderate duty imposed on certain kinds of stock.

THE VALUE OF ASSOCIATION.

The formation, at Spokane Falls, last month, of the Northwest Nursery Association is an important step in the right direction. The objects of the association are broader than are those of the Eastern and Western Nurserymen's Associations, or the American Association of Nurserymen, and we expect to see earnest, practical work result from the new union. It has seemed to us that the American Association does not stand for what it should. It might be a powerful organization in the dissemination of valuable information to nurserymen. True, the annual meetings are of interest to those who attend, but there the work ends. The association should be of practical benefit to the members throughout the year. Its officers or its committees should keep posted on matters of interest to the trade, and bulletins should be issued, informing the members of the state of trade in various portions of the country. In the absence of such bulletins THE NATIONAL NURSERYMAN has undertaken to give this information, and the hearty manner in which it has been received has proved that this was one of the things the nurserymen were in need of. Those in the business cannot afford to neglect means of information concerning the trade.

As a result of the agitation against the indiscriminate distribution of seed by the government more than $100,000 has been stricken from the estimate to cover this object for the year ending June 30, 1894, and Secretary Morton recommends that the remaining $35,000 of the estimate be confined to the purchase of new and improved varieties of seeds and that these be distributed through the experiment stations for proper testing. This wise policy will indirectly benefit the nurserymen.

YOUR CO-OPERATION NEEDED.

The publishers of THE NATIONAL NURSERYMAN are willing to spare no expense or effort to make the nurserymen's trade paper representative of the interests of all in the business. No trade has a handsomer or more enterprising journal. The co-operation of all the nurserymen of the country is absolutely necessary to ensure its success. The journal has been established and placed in your hands. Do you not feel that it is and will be of constantly increasing value to you? Is it not a good business investment for you to subscribe for a journal which keeps you posted upon matters that are of daily use in your business? A moment's reflection, we are sure, will cause you to send at once your dollar for a year's subscription. The price is small compared to the value received.

HERE IS THE PROOF.

VOLUNTARY TESTIMONIALS OF THE VALUE OF "THE NATIONAL NURSERYMAN" AS AN ADVERTISING MEDIUM—MORE ORDERS THAN FROM ANY OTHER PAPER PUBLISHED—NURSERYMEN FROM ALL QUARTERS HASTEN TO GIVE DUE CREDIT.

From all quarters come letters of commendation and hearty endorsement of the policy and purpose of THE NATIONAL NURSERYMAN. In addition to the satisfaction which its columns give to those who appreciate the value of the information given, there are the strongest testimonials regarding the value of the journal for advertising purposes. Here are a few of the unsolicited words of commendation:

MORE ORDERS THAN FROM ANY OTHER.

F. G. HEXAMER, BROOKLYN, N. Y.—"Please continue my advertisement for nine months more, or one year in all. I have received more orders from your paper than from any other paper published."

PROOF OF ITS VALUE.

CHARLES R. FISH & CO., WORCESTER, MASS.—"I am glad to enclose the price of the journal, as I have been favored with all except the June number, which please send to make up my full number, twelve, for the year. I am convinced that it is of very great value to every grower and dealer in the business. Please send it regularly in the future. I might add that several times during the past year I have been in want of some special stock which seemed scarce, but by the assistance of the NATIONAL NURSERYMAN I have invariably procured it with comparative ease."

ESTEEM IT VERY HIGHLY.

HART PIONEER NURSERIES, U. B. PEARSALL, FORT SCOTT, KAN.—"We esteem your journal very highly as a medium through which all nurserymen can exchange views, and we trust you will have the support to which you are so justly entitled."

IT HAS NO EQUAL.

J. WRAGG & SON, CENTRAL NURSERY, WAUKEE, IA.—"Enclosed find $1. Don't for a minute think of discontinuing the paper to us. Think it worth many times the price, and as a medium of getting acquainted with the best men of the United States that are engaged in horticulture it has no equal."

NO PRICED ADVERTISEMENTS.

J. W. ADAMS & CO., NORTH MAIN STREET NURSERY, SPRINGFIELD, MASS. "We enclose $1, as requested, for the NATIONAL NURSERYMAN. We thought to draw the line before admitting this new claimant, but noticing your purpose not to admit priced advertisements, we had to reconsider, it being so much in line with our repeated advice."

COULD NOT DO WITHOUT IT.

G. H. MILLER & SON, ROME, GA.—"Do not see how we could get along without it."

WILLIAM M. PETERS' SONS, WESLEY, MD.—"We do not wish to be without it."

SETH WINQUIST, RUSSELLVILLE, ORE.—"Enclosed find a dollar bill for which please continue our only trade paper for another year. Times are hard, but can't get along without it. I wish you success."

AN IOWA OPINION.

GARDNER & SONS, OSAGE NURSERIES, OSAGE, IA.—"It is truly worth its weight in gold to those in the trade. We wish you the success that you deserve."

ART AND NATURE.

Hon. Charles W. Garfield, of Grand Rapids read a paper before the Western New York Horticultural Society, on "The Art Which Doth (not) Mend Nature" in which he deprecated the practice of too closely trimming trees for ornamental purposes. An abstract of his paper follows:

"The object in the selection of this topic is not so much to indicate what it shall cover, as to form a sort of clothes-line upon which can be pinned a number of articles in the form of criticism and suggestions upon subjects that are quite diverse, and not arranged in logical order, but having one common factor.

"Step with me for a moment to the border of the average city or village cemetery, and note the method in which the so-called embellishments of the grounds in the form of trees and shrubs, plants and flowers have been handled. See how trim and accurately pointed are the forms of the junipers and red cedars, scattered here and there over the premises. Note with what precision the shears have been employed in forming the oval, globular, or pyramidal heads of the Norway spruce. Just see how the native drooping habit of the hemlocks has been metamorphosed into a stiff geometrical form. Here and there a lot has been enclosed by a hedge that has been pruned into the rigidity of right lines. Cast your eye over the triangles, rectangles, circles and ovals of the flower beds that adorn the undivided graves. Even the shrubs, the distinctive character of which is due to the individuality of leaf and branch, have been cut to one model. There is a stiffness and unnaturalness that makes one feel as if he were out of place except he is arrayed in swallow-tailed coat, choking collar and silk tile; and still, some of nature's most beautiful forms, most attractive creations have been taken in the name of adornment, and shorn of the very elements of attractiveness, in order to bring about this condition with the term 'city cemetery.'

"I wish to enter an emphatic protest against this misuse of the beautiful creations of nature, and to suggest if cold, stiff formality is to rule, that granite and marble be employed exclusively, and that delicate live things that naturally if left alone assume beautiful proportions and delicate forms, be excused from forming any intrinsic part of such an environment, after being shorn of all those attributes that render them attractive to people of taste. I find men all over the country in charge of these places (which should be, because of their association, made quite beautiful), even calling themselves plantsmen and horticulturists, who are entirely lacking in every element fitting to these employments. Ought not our horticultural clubs and societies devoted to progressive horticulture, to give utterance in no feeble way to their protest against these outrages upon the profession they are engaged in developing and elevating?"

RECENT PUBLICATIONS.

"Selection in Seed Growing" is the title of a valuable little pamphlet published by W. Atlee Burpee & Co., of Philadelphia. It embraces papers read at the World's Horticultural Congress on the subject of seeds, and the discussions which followed. Among the subjects treated are: "Pedigree or Grade Races in Horticulture," "Selection in its Relation to Seed Growing," "Seed Growing in Denmark," "American Seed Growing," "Modern Methods of the Seed Trade," "The Seedsman's Trial Grounds." Philadelphia: W. ATLEE BURPEE & CO.

The fourth annual report of the Horticultural Society and Fruit Growers' Association of British Columbia contains a large amount of valuable matter in the form of papers and discussions upon horticultural subjects as viewed by residents of a section about which comparatively little is known in the United States. It is believed that the fruit industry in British Columbia is but in its infancy. The secretary of the association is A. H. B. MacGowan of Vancouver.

The second biennial report of the Oregon State Board of Horticulture, recently prepared under the direction of the secretary, George I. Sargent, of Portland, is a comprehensive record of work in horticulture in the state during the year and there is, besides, a large amount of miscellaneous matter connected with horticulture in its varied forms on the coast which makes it a most interesting volume.

In Part VI. of "The Book of the Fair" the chapter on foreign manufactures is continued. The opening pages are devoted to illustration and description of the exhibits of Austrian bronzes, Bulgarian statuary and Bohemian glass. Then follow the reproduction of the beauties of the Belgian section and then the Norway and Russian sections, including Russian bronzes and elaborate Norwegian carved work. The beautiful exterior of the Italian pavilion introduces specimens of Italian marble statuary, china and decorations. The Spanish, Mexican and South American exhibits and those of the Ottoman Empire, Corea, Bulgaria and Siam vie with the Japanese vases, china and bronzes which follow. Handsome full-page illustrations of Krupp's gun exhibit, the lion fountain and obelisk in the grand basin, and the likenesses of the foreign commissioners are features of Part VI. The full-page illustration of the grand basin from administration tower far excels any other attempt to reproduce this imposing view. Chicago: THE BANCROFT COMPANY.

The U. S. Department of Agriculture has issued numbers 2, 3 4 of volume V. of the "Experiment Station Record," a report of the crops of the year 1893, and the report of the statistician, all of which contain valuable information for the horticulturist.

The report of the horticulturist of the Canada Department of Agriculture, John Craig, contains, among other valuable matter, a tabulated statement of information from fruit growers throughout the province of Ontario on the subject of pear and apple blight, descriptions of new varieties of fruits and a district fruit list adapted to the province of Quebec. Many interesting experiments, too, are noted.

The general catalogue of fruit and ornamental trees and shrubs, issued by Ellwanger & Barry is in the usual attractive form this year with a variation in the cover and the addition of novelties. This catalogue of 152 pages is a recognized standard in all the offices of nurserymen in this country. This is the 54th annual publication.

In Part IX of "The Book of the Fair" the reader is introduced to some of the marvels of recent invention in the mechanical arts, including silk machinery, cotton and woolen looms, paper making, wood working, printing, book binding, moulding and drilling machinery, fire and drilling apparatus, etc. Realistic illustrations of the burning of the cold storage building are a feature of this number. In this part also, is begun the interesting chapter on agriculture and the building devoted to it, which was one of the most artistic in the group. The illustrations here are among the most attractive in the book and the descriptive matter is correspondingly attractive. A full page illustration of the famous colonnade adorns this part, which closes with a striking reproduction of the poultry exhibit. "The Book of the Fair" is a valuable souvenir of the world's greatest wonder, a summary of modern civilization. Chicago: THE BANCROFT COMPANY.



Electrotypes and Cuts

OF FRUITS, TREES,
PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

ASPARAGUS ROOTS

LARGE SUPPLY.

Palmetto, Barr's Philadelphia Mammoth,
Conover's Colossal.

Milford Nurseries, Address, ALEX PULLEN, MILFORD, DEL.



STRAWBERRIES. 999,999 Plants.

60 VARIETIES, OLD AND NEW.

Kansas, Older and Palmer. Raspberry Tips, and all other kinds of Small Fruit Plants. Lowest prices. Write for Catalogue.

F. W. DIXON, Successor to DIXON & SON, NETAWAKA, KANS.

Honey Locust Trees and Hedge Plants.

Best and handsomest Hedge for cold climates. No. 1, two and three years old. Also trees 3 to 5 feet high.

Osage Orange Hedge Plants.

Choice No. 1 and No. 2.
Established 20 years. 200 acres. Wholesale.

A. E. WINDSOR,
Havana, Mason Co., Ill.

Bed Rock Prices.

BOXING FREE, if cash accompanies order.
TEN PER CENT. DISCOUNT on all orders received before April 1.
Reference—Commercial National Bank, Appleton, Wis.

NORWAY SPRUCE, 6 to 10 in. seedlings.
" " 10 to 15 in. transplant.
" " 15 to 20 " "
" " 20 to 26 " "
SCOTCH PINE, 10 to 15 in. seedlings.
" " 15 to 20 " transplant.
" " 20 to 26 " "
" " 26 to 30 " "
ARBOR VITÆ, 10 to 15 " seedlings.
" " 15 to 20 " "
SOFT MAPLE, 3 to 5 feet.
" " 5 to 7 "
WHITE ELM, 5 to 7 "
" " 7 to 10 "
" " 10 to 12 "
BUTTERNUT, 8 to 10 "
MOUNTAIN ASH, 8 to 10 feet.
BOX ELDER, 3 to 5 feet.
" " 5 to 7 "
WHITE BIRCH, AMERICAN, 8 to 10 feet.
WHITE BIRCH, AMERICAN, 10 to 12 feet.

I have a heavy stock of the varieties and sizes given, which must be closed out.

WRITE ME FOR BOTTOM FIGURES.

W. D. BOYNTON, Nurseryman, SHIOCTON, WIS.

Superb and Valuable Novelty.



Double White Anemone

"WHIRLWIND."

A Double White Anemone is something entirely new. Proven by five years' trial to be permanent and perfectly hardy; habit like the well-known White Japan Anemone—same strong growth and healthy foliage, and more abundant bloomer. Flowers two and a half to three inches across, have several rows of white sepals, and flowers last much longer than those of the single variety. Plants from two and a half to three feet high.

HARDY, STRONG AND FREE BLOOMER,

decided advantages, and must make a demand for it on all ornamental grounds. Especially recommended for exposed situations and cemetery planting, where it is inconvenient to give winter protection.

Write for Wholesale Price List and Vick's Floral Guide 1894. Contains 112 pages 8x10½ inches, with descriptions that describe, not mislead; illustrations that instruct, not exaggerate. They will be mailed free on application.

ROCHESTER, N. Y.

JAMES VICK'S SONS.

NOTICE!

Is hereby given that we are ready to quote "hard times" prices on . . . .

Apple. Lowest prices ever quoted. BELOW "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for Cherry. Get our prices. . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

Transplanted Evergreens and Shade Trees,

White Spruce, Norway Spruce,
Arbor Vitæ, Balsam Fir,
White Pine, Box Elder,
Soft Maple and Catalpa.

Write for prices.

The Sherman Nursery Co.

(mi) **CHARLES CITY, IOWA.**



WE ARE HEADQUARTERS FOR

STEPHEN HOYT'S SONS'

Celebrated

Green Mountain Grape Vines.

The earliest and most delicious Early Grape yet introduced.

Also a fine line of

CHOICE NURSERY STOCK.

We supply dealers and the wholesale trade.
Send us your want list. Address

STEPHEN HOYT'S SONS, : : : NEW CANAAN, CT.

The Mt. Hope Nurseries

of LAWRENCE, KANSAS,

Offer for Spring, 1894, **BEN DAVIS APPLE TREES** and other sorts in car lots or less quantity, including a liberal proportion of **GANO.** *Wholesale trade solicited.*

Address, A. C. GRIESA & BRO., Props.

GEYER BROS., ROCHESTER, N.Y.

SURPLUS

Standard Pears, Dwarf Pears, Cherries, Norway Spruce and Grape Vines.

ROSES.—Gen. Jacqueminot, Madam Plantier, Anne De Diesbach, Alfred Colomb, Paul Neyron, Prince Cam. De Rohan, Coquette Des Blanches, Pius IX, Queen of the Prairie, Gem of the Prairie, Luxemburg, Crested Moss, Salet Moss, Capt. John Ingram, White Moss.

OUR STOCK HAS THE BEST OF CULTIVATJON, AND IS HEALTHY AND THRIFTY.

Headquarters

For the following Surplus Stock for Spring Delivery, 1894:

75,000 PEACH ONE YEAR OLD FROM BUD.

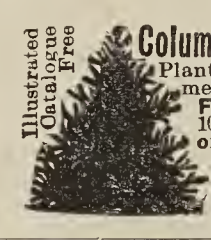
2,000 CAROLINA POPLAR, 9 TO 10 FEET.

2,000,000 STRAWBERRY PLANTS FROM YOUNG BEDS.

1,000,000 ASPARAGUS ROOTS ONE AND TWO YEARS OLD.

Nurserymen can save money by getting our prices before placing their orders elsewhere. Correspondence solicited.

W. M. PETERS SONS, WESLEY, MD.



Columbus Evergreen! A Souvenir of the World's Fair. Plant an Evergreen from my nursery in memory of the great occasion, given **FREE** to each of my customers. Over 10 million trees for wind-breaks and ornamentation. Hardiest variety. ☞ Good Local Agents Wanted.

D. HILL, Evergreen Specialist,
DUNDEE, ILLINOIS.



At Wholesale.

STANDARD and DWARF APPLES, CRAB APPLES
STANDARD and DWARF PEARS, CHERRY, PLUM,
GRAPE VINES, 2 yrs., STRONG.
RASPBERRIES-Transplants, BLACKBERRIES-Root Cuttings
ORNAMENTAL TREES, SHRUBS. CLEMATIS.

ROSES.

HYBRID PERPETUAL, MOSS, CLIMBING AND TEA.
EXTRA STRONG 2 yr. PLANTS, all on own roots.

Fine Assortment of Varieties

PRICES ON APPLICATION. Address

A. D. PRATT, Rochester. N. Y.

SITUATION WANTED. A reliable and thoroughly posted man, with inside and outside work, wants a position indoors in a **Seed, Plant or Nursery Establishment.** Could acceptably fill position as Superintendent of Cemetery. Address, J. B. T., 305 Cox Building, Rochester, N. Y.

The Greenville Strawberry,
The Eureka Raspberry, . .
The North Star Currant, .
The Ohmer Blackberry, . .

SURPLUS STOCK FOR 1894.

Strawberries.—Dayton, Bubach, Haverland, Warfield, Cumberland, Parker Earle, Beder Wood, Edgar, Queen.

Raspberries.—Gregg, Souhegan, Ohio, Tyler, Palmer, Johnston Sweet, Hilborn, Cuthbert, Shaffer, Thompson's Early, Ada.

Blackberries.—Minnewaski, Erie, Snyder, Early Harvest, Taylor, Wilson, Jr., Lucretia Dewberry.

Gooseberries.—Downing and Industry.

Currants.—Fay's, North Star.

Grapes.—Concord, Niagara, Worden, Moore's Early, Pocklington.

Will be pleased to quote prices on any stock offered.

W. N. SCARFF, New Carlisle, O.

YOUNG CLEMATIS

Propagated last summer, now starting into growth in three inch pots—if repotted or planted out of doors they will make fine plants for retailing next fall. Last spring we sold over ten thousand plants and we expect even larger sales this season. Write for prices and let us enter your order before our assortment is broken. The plants will run from 10 to 18 inches high. Besides other fine varieties we offer the following sorts:

Jackmanni, Henryi, Ramona, Miss Bateman, (white—flowers quite fragrant), **Paniculata, Viticella Rubre Kermissena.** (best—large flowering red).

We also offer rooted cuttings of the above kinds at prices that will be a surprise.

W. S. LITTLE & CO.,

COMMERCIAL NURSERIES, Rochester, N. Y.

Nurserymen's Stock Book.

COMPLETE AND PRACTICAL.

Size, 16x21 inches.—58 pages Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,

ROCHESTER, N. Y.

Millions of Visitors

to the WORLD'S FAIR, CHICAGO, have admired the splendid collection of Plants exhibited by the **BOSKOOP HOLLAND NURSERY ASSOCIATION, on Wooded Island**, consisting of Magnolias, Roses, Rhododendrons, Azaleas, Phlox, etc., and for which **the highest award, Medal and Diploma, has been granted.**

BUSINESS! BUSINESS! BUSINESS!

I NOW MEAN BUSINESS, and am prepared to accept import orders for Early Spring Delivery, at

Hard-Time Prices.

Send for Special Spring List of

Budded and Tree Roses, Clematis, etc.

and learn of the **SPECIAL OFFER TO DEALERS.**

C. H. JOOSTEN,

3 COENTIES SLIP. NEW YORK.

Agent for the BOSKOOP HOLLAND NURSERY ASSOCIATION.

Albertson & Hobbs,

Extensive Growers of

Apple, Peach, Cherry, Plum, etc.

Are prepared to offer to the trade in **Car Load** lots, **APPLE** and **PEACH**, or will car general assortment of other stock.

Also large lot of **APPLE SEEDLINGS, MARIANNA PLUM** stocks, **BUDS**, etc. Special prices on early contracts. . . . . .

Try our new SPADES. See Circular.

Just the thing.—Geo. Peters & Co., Troy, O.
Fills its place well.—W. F. Heikes, Huntsville, Ala.
Just the thing for heavy digging.—Flemer & Felmly, Roselle, N. J.
Satisfactory; strong; stand heavy work.—Taylor, Peters & Skinner, North Topeka, Kan.

Correspondence solicited. Personal inspection courted. Address

Albertson & Hobbs, Bridgeport, Marion Co., Indiana.



STATE OF NEW YORK, } ss.
CHAUTAUQUA COUNTY. }

Personally appeared before me Lewis Roesch, who, being duly sworn, says that he propagated the above mentioned Vines, Trees and Plants for sale. That they are in prime condition, guaranteed strictly true to name and of size and quality represented in his Catalogue.

LEWIS ROESCH,
Fredonia, N. Y.

Subscribed and sworn to before me, this 10th day of January, 1894.

F. R. GREEN,
Notary Public.

To Exchange.

RUSSIAN and other Apricot trees, also Plum and Peach trees to exchange for Currants and Gooseberries. An assortment of both kinds wanted. State what you have to offer. Address

Emporia Nursery, Emporia, Kansas.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

Fine Wholesale stock of the two new Hedge plants,
LIGUSTRUM MEDIA, LIGUSTRUM IBOTII,
Splendid stock of **RUSSIAN GOLDEN BARKED WILLOW,**
RED CORNEL, FORSYTHIA SUSPENSA,
HYDRANGEA PANICULATA (Type.)
WHITE SPRUCE, NORWAY SPRUCE.
CLEMATIS PANICULATA, Splendid stock in all grades from extra heavy to mailing sizes
Immense stock of Hardy Perennials, including best varieties of
IRIS, PHLOX, PYRETHRUMS, PÆONIES,
HOLYHOCKS, LARKSPURS. ETC., ETC.
over a thousand distinct species and varieties.

THE READING NURSERY, (Established in 1854.)
JACOB W. MANNING, Proprietor, **READING, MASS.**
Wholesale Lists ready; write if you have not received one.

BUY THE BEST.

WHITNEY'S IMPROVED

WESTERN TREE DIGGER.

Manufactured by

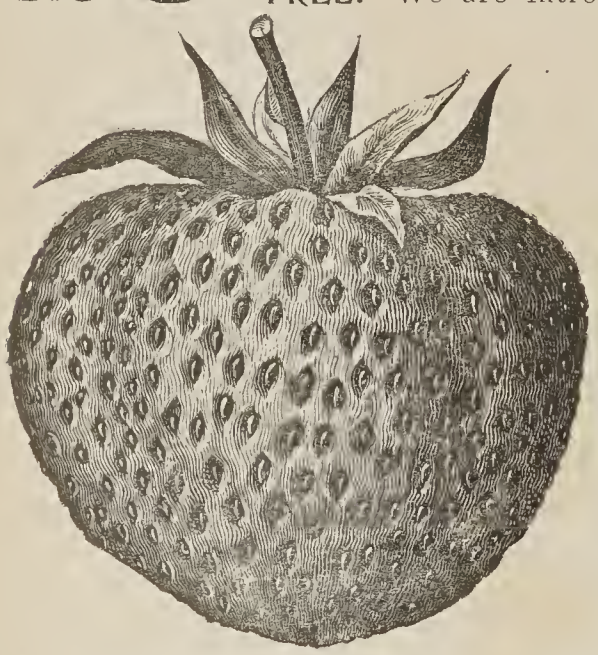
N. A. WHITNEY,

FRANKLIN GROVE, LEE CO., ILL.

Sent for Prices.

OUR BIG **6** **FREE STRAWBERRY** given away

FREE. We are introducing 5 of the Finest Strawberries ever introduced, and giving away our **BIG 6.** The *Rural New Yorker* says: **RIO** as a *first early* berry. This is well worthy of trial because of its size, shape, quality and color. The quality is excellent. M. A. Thayer: The more I see of the **RIO,** the better I like it.



Seedsmen and **Nurserymen** who desire to catalogue these berries will send for TERMS at once.

A large stock of **Cabbage Plants** for Spring trade. **White Potato Onions,** etc. Address,

CLEVELAND NURSERY CO.,
RIO VISTA, VA

We carry the Largest and Most Complete Stock of

NURSERYMEN'S TOOLS AND SUPPLIES

IN THE COUNTRY.

Complete illustrated Catalogue and Price-List mailed on application.

WEAVER, PALMER & RICHMOND,
ROCHESTER, N. Y.

Mazzard and Mahaleb Cherry, Myrobolan Plum.

ALL ABOVE SEEDS STRATIFIED IN SAND.

FRENCH CRAB and PEAR. **NATIVE APPLE.**

OF VERY BEST QUALITY.

Prices and samples free. ***THOMAS MEEHAN & SONS,***
Germantown, Phila.

Gilbert Costich, Rochester, N. Y.

SURPLUS FOR SPRING, 1894.

Apple, Cherry, Dwarf Pear and Plum,
Evergreens, Ornamental Trees, Etc.

W. T. HOOD & CO.,

(Old Dominion Nurseries.)

RICHMOND, - - - - - - VA.

250 ACRES IN NURSERIES.

A Full Line of Fruit and Ornamental Trees, Shrubs, Etc.

200,000 Peach, (Budded on Natural Stocks.)
100,000 Japan Pear Seedlings.
100,000 Apple "
50,000 Mariana Plum stocks.
50,000 Concord Grapes, 2 years.
10,000 Mulberries—Downing, Hicks, New American.

PEACH SEED.—Seed from the wild fruit of the mountains of East Tennesee and Western North Carolina, where "Yellows" and other diseases of the Peach are not known. Can dig in the Fall, beginning about Sept. 20th. In the Spring any time after Feb. 1st. **Having a Large Cool Storage Cellar,** we can dig early in the Spring and make shipment as necessary and avoid risk of winter storage.

FREIGHTS LOW. **TRUNK LINES "RUSH" OUR TREES.**

Ornamental . . . . . TREES,

LARGE SMALL

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Nursery Business For Sale.

In one of the best towns in Kansas. Doing a good business. A small cash payment required. Only cost you a postal card for particulars. Address NATIONAL NURSERYMAN,
Rochester, N. Y.

▲▲ *Asparagus Roots.* ▲▲

FIVE BEST KINDS.

Elmira and Columbia White. **Write for Wants to**

I. & J. L. LEONARD, IONA. N. J.

WANTED.—A list of varieties and prices of 4 to 5 feet Surplus Stock; also 50,000 Grafts.

CORNING NURSERY CO.,
CORNING, IOWA.



The North Star Currant.

Plate No. 1,
Copyrighted by the Jewell Nursery Co.,
Lake City, Minn.

OVER.

THE NORTH STAR CURRANT.

AMERICA has originated but three Red Currants. We are indebted to Europe for all the other varieties in general cultivation. THE NORTH STAR is distinctly an American production. It is propagated in the extreme cold climate of Minnesota, where it has been carefully tested in every conceivable manner, and is now offered as a candidate for public favor in full confidence that it has many excellent qualities not possessed by any other Red Currant.

The fruit is very uniform in size, bright red, larger than the Red Dutch or Victoria, and rivalling the Cherry Currant, while each bush will yield double the quantity of fruit. It is less acid, much sweeter, and very agreeable to eat out of hand or for table use. The bunches are from four to six inches long, and densely packed with fruit, involving only half the labor in harvesting the crop. The berries cling to the branches long after the fruit is ripe and do not shell or drop off. This habit lengthens the season of this currant from four to six weeks. It is an early and prolific bearer, producing twenty-five per cent. more fruit than the common sorts. It is never affected by borers or other insect enemies.

THE NORTH STAR has a bright, healthy foliage, not too dense, which it retains very late in the fall, thus aiding to develop the strongest possible fruit buds. Its strong, rapid growth makes it particularly adapted for cultivation in the TREE FORM, as it requires but little pruning. It is the most desirable variety known for propagation as a TREE CURRANT.

The points that commend THE NORTH STAR particularly to the Nurseryman are :

1st. Its extreme vigor and hardiness. It will grow in ANY climate.

2nd. Its rapid growth, insuring a large proportion of heavy plants at an early age.

3rd. It propagates equally well from layers or cuttings, as it "catches" readily.

4th. It has more STRONG SELLING POINTS than any other currant we know.

We conscientiously believe it the BEST currant in existence to-day.

TESTIMONIALS OF ACTUAL GROWERS.

SPRINGFIELD, Mass., July 16th.

Our plants have produced several bushels in such quantities and quality that we are more than ever pleased with them. Merchants have come to the nursery for them, paying us from 10 to 12 cents per quart, and we have had to refuse many orders. Very truly yours, J. W, ADAMS & CO.

LUCAS CO., Ohio

I have raised an average of six quarts to each bush, or three hundred and twenty bushels per acre and sold them at $2.50 per bushel. W. W. FARNSWORTH.

PAINESVILLE, Ohio, Aug. 5, 1891.

GENTLEMEN.—The plants of the "North Star" you sent us last spring have made a very vigorous growth so far and promises to be one of the best we have. Yours truly, STORRS & HARRISON CO.

NEBRASKA STATE EXPERIMENTAL STATION, Tecumseh, Neb , W. R. HARRIS, Mgr. : The North Star Currant on my grounds has made a good growth and had a few bunches of currants on it this year. I am well pleased with it so far in growth and fruit.

HAMPTON. Iowa, Dec. 2, 1893.

I have fruited the "North Star" and it is very satisfactory.—J. C. FERRIS, Nurseryman.

FAIRVIEW NURSERIES, LANCASTER, Pa., Dec. 11, 1893.

I got two plants of the North Star Currant in the fall of 1891 and I find it is an immense bearer, good size, and of the best quality. Am sorry I did not get more at that time. Respectfully yours, DANIEL D. HERR.

REPORT OF THE MASSACHUSETTS STATE FRUIT COMMITTEE, 1891, ROBERT MANNING BURTON, Chairman : It is very productive and of excellent flavor ; indeed it is the best of the Red Currants.

THE NORTH STAR readily retails for $5.00 per dozen.

TERMS, WHOLESALE PRICES, ETC., will be submitted on application. Elegant colored lithograph plates furnished FREE for Agent's Plate Books. Generous terms will be extended to parties desiring colored plates for use in catalogues, and all communications will receive prompt and courteous attention.

Very truly yours,

THE JEWELL NURSERY CO.

J. Cole Doughty, Sec'y.

LAKE CITY, MINNESOTA, Jan. 1st, 1894.

Cayuga Nurseries.

We would call particular attention to our **Surplus of Currants, Gooseberries, Blackberries, Raspberries, Plums, Cherries, Apples, Dwf. Pears; O. L. Mt. Ash,** 4 to 8 ft.; **C. L. Wpg. Birch,** 5 to 8 ft.; **Paul's Thorn,** scarlet and white, 3 to 4 ft.; **Wier's C. L. Maple, Rose Mary Willow** and **Weedsport Prune.** Also a complete line of Imported Fruit Tree Stocks, ready for delivery from our cellars early in Jan., '94. *Specialty, Superior Grading.*

WILEY & CO., Cayuga, N. Y.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

· SPRING OF 1894. ·

All Young and Thrifty and First Class In Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
4,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, Strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.
100 lbs. " " " Seed from plants raised of seed obtained from the originator of this variety.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,
WILLOWDALE, Chester Co., Pa.

Geneva Nurseries.

YOUNGERS & CO., Props.
. . GENEVA, NEB. . .

WE HAVE A LARGE SURPLUS OF

· SHADE TREES. ·

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

SURPLUS.

ROCKY MOUNTAIN EVERGREEN SEEDS,

100 lbs. which we don't care to carry over. Concolor, Prugens and Englemanii at your own price. We are prepared to gather to order all kinds of desirable **Rocky Mountain Flower Seeds.** Send for Catalogue.

COLORADO NURSERY CO.,
Established 1880. Loveland, Colo.

Knox Nurseries.

Established in 1851

300,000 Two-year old Apple Trees, 4 to 5 and 5 to 6 feet at panic prices.

150,000 Ben Davis.

H. M. Simpson Co.,

Vincennes, Ind.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,
ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR
UNITED STATES AND CANADA.

ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK.

No Trees are better, nor did we ever offer a larger General Stock—one item being several million Whole Root apple,. Buyers who have been disappointed in Western trees because of poor roots (1 inch pieces are grafted by some), lack of care in digging &c., will like ours; we use No. 1 stocks, shortened to 8 inches, the finished grafts 12 inches long. Free packing. Free extra count—10 per cent. Free Freight. Stark Bro's, Louisiana, Mo.
e.f.i.

Transon Bros.' Nurseries,

BARBIER BROS. & SON, Successors.

Nurseries : ORLEANS, (FRANCE.)

BEG TO OFFER SEVERAL MILLIONS OF

Mirobolan Stocks.

OUR CATALOGUE containing wholesale prices of all fruit tree stocks and extensive list of fruit trees, Hardy Ornamental plants, Climbers, the hardiest and best Conifers, Roses on own roots or grafted, and NOVELTIES in these kinds; also small Conifers, Deciduous and Evergreen Ornamental Trees, one and two years' seedlings, most useful for nurserymen, may be had free on application to

Messrs. Knauth, Nachod, & Kühne, 5 AND 7 WILLIAM STREET, NEW YORK.

John Waterer & Sons, Lt'd,

NURSERYMEN,

BAGSHOT, ENGLAND.

RHODODENDRONS AND OTHER HARDY EVERGREENS.

Correspondence solicited.

FOR SALE CHEAP.

Tree Digger, with Singletree, Chains and Cables, all complete. A No. 1 Digger, almost new. Price $12.00.

GEO. HUNT, PORT BYRON, ILL.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots. Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), . Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . .

HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WE are still in the market with our **Dry Baled Moss,** and at prices to correspond with the hard times. We are in need of Apples, Plums and Cherries in exchange. Also have a good stock of Dwarf Juneberry and High Bush Cranberry in cellar for early shipment.

Z. K. JEWETT & CO., Sparta, Wis.

---

600 ACRES. ESTABLISHED 1852. 13 GREENHOUSES.

PHOENIX NURSERY COMPANY.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

Nurserymen and Florists, Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. **BLOOMINGTON, ILL.**

C. F. McNAIR & CO.

DANSVILLE, N. Y.,

Growers of Fine Fruit Trees.

A LARGE STOCK OF STANDARD APPLES IN SURPLUS FOR SPRING.

Apple Scions in Large Assortment.

WRITE US FOR PRICES, ETC.

Correspondence Solicited.

Raffia! Raffia! Raffia!

BEFORE BUYING GET SPECIAL QUOTATIONS FROM THE UNDER NAMED FIRM, THE FIRST INTRODUCERS OF AND THE LARGEST IMPORTERS AND MERCHANTS OF THIS EXCELLENT TYING MATERIAL.

JAMES T. ANDERSON,

135 and 137 Commercial Street, London, England.

JOHN PALMER & SON, LTD.,
NURSERYMEN,
ANNAN, Dumfriesshire, Scotland.

The oldest Exporters from this country to America, of a general assortment of Nursery Stock, including Millions of Seedling and Transplanted Evergreens, Forest and Ornamental Trees, Evergreens, and Shrubs, such as Norway Spruce, Austrian and Scotch Pines, Balsam, Fir, Norway Maples, Mountain Ash, Scotch Larch, Birch, and Elms, European Linden and Beech, also Industry, Crown Bob, Whitesmith, and Lancashire Lad Gooseberries, the finest and hardiest varieties of Hybrid Grafted Rhododendrons, Clematis and H. P. Roses, in large quantities and of best quality. ☞ Prices Very Low. Lowest through rates from Annan to all points in United States and Canada. Catalogues free. Corresrondence and Early Orders Solicited.

SURPLUS

1,500 Cherry trees, 2-year old; fine stock.
Also a fine lot of Standard Kieffer Pears.
Write me for special prices. . . . . .

F. X. HEMM, • • PIQUA NURSERY, • • PIQUA, OHIO.

A Big Lot of **Hardy Ornamental Shrubs, Vines and Plants,** must be sold by Spring of 1894 to clear leased land. Cheapest! Send for Surplus Price List.

B. P. HANAN, Proprietor of the Arlington Nursery, **Arlington, Reno Co., Kans.**

HA! HA! HA! HA!



What Causes This Merry Laugh?

This man is happy because he placed his order for Nursery Stock with the Continental Nurseries.

YOU CAN BE JUST AS HAPPY BY DOING LIKEWISE.

- - FOR SALE. - -

Plums, Apples, Standard and Dwarf Pears, Maples, Ash-leaf, Silver-leaf and Weir's Cut-leaf; Mountain Ash, Oak-leaf; Catalpa, Linden European, Honey Locust, Carnations, Chrysanthemums, Chinese Matrimony Vines, Azaleas, Roses.

SPECIAL BARGAINS.

Standard Pears — Bartlett, Beurre Bosc, Clapp's, Howell, Kieffer (with other sorts), Seckel, Vermont Beauty and Vicar.

Dwarf Pears — Clapp's Favorite, Duchess d'Angouleme.

Cherry — Louis Phillippe.

Plum — Bradshaw, German Prune, Stanton.

Ampelopsis Veitchii, Azalea, Carnations and Chrysanthemums, Niagara Grape, Myatt's Linnæus Rhubarb.

BROWN BROTHERS COMPANY.

CONTINENTAL NURSERIES,

☞ We feel safe in offering a few thousand more Peaches, second grade; also some first class.

ROCHESTER, N. Y.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

April, 1894.

Painesville Nurseries.

40th Year. 1,000 Acres. 28 Greenhouses.

Some extra fine Imported Stock, on which we can make low rates; strong, bushy, well furnished stuff; plenty of flower buds; altogether the best plants have ever handled.

Hardy Azaleas.—Mollis and Ghent; seedlings and named varieties.

Chinese Azaleas.—9 to 11 inch heads, bushy and clean; choice assortment best named kinds for forcing.

Rhododendrons.—Fine selection best named hardy and Catawbiense hybrids. 15 to 18 and 18 to 24 inches.

Tree Roses.—**Holland Stock,** in fine condition.

In cold storage cellars for spring delivery, the largest and most complete stock in the United States. Orders booked now and set aside in cellar ready for shipment any time wanted.

Fruit Trees.

All the leading varieties, especially fine lots of Standard Pears, Dwarf Pears, Plums, Apricots, Nectarines, Mulberries, etc.

Small Fruits.—The largest and best assortment, carefully dug and graded, pure stock.

Grape Vines.—Immense stock No. 1, one and two years, splendidly rooted.

Nut Trees.—Headquarters for Chestnuts, American and Japan; Butternuts, Black and Japan Walnuts, Shell-bark Hickories, Filberts, Pecans, etc.

Ornamentals.

We lead in this department. Largest and best stock for spring '94 have ever carried. Call attention to extra fine blocks of

Willows. — Wisconsin, Babylonica, Laurel-leaved, Gold-barked, Killmarnock and New American.

Poplars.—Carolina, Lombardy, Balsam, Aurea and Pyramidal.

Maples.—Silver, Wier's cut-leaved, Norway and Ash-leaved.

Flowering Thorns. — White, Pink and Paul's scarlet.

Tea's Weeping Mulberry, Young's Weeping Birch, White-leaf Weeping Linden, Imperial Cut-leaf Alder, White Ash, Scotch Birch, Purple Beech, Elms, Horse Chestnuts, Magnolias, Salisburia, Rose-acacia, European Euonymous, Tulip trees, etc.

Evergreen Trees and Shrubs

One of the best collections of **Hardy Bulbs, Shrubs, Climbing Vines and Plants.**

75,000 Roses.

Strong, field grown Hybrid Perpetuals, Mosses and Climbers, clean and thrifty; no better lot in the country.

Seeds.—**Flower and Vegetable.**—The best tested stocks at lowest rates.

Always open to inspection. Come and see.

No trouble to estimate on your list of wants. Spring Catalogue and Trade List FREE. Ready in January.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

LARGE QUANTITIES OF THE BEST VARIETIES OF **Tea, Hybrids and Forcing Roses,**

WELL GROWN ON BRIER STOCK.

Best German, French and English Novelties at cheap rates.

OWN SEEDLING — *"KAISERIN"* — STRONG PLANTS.

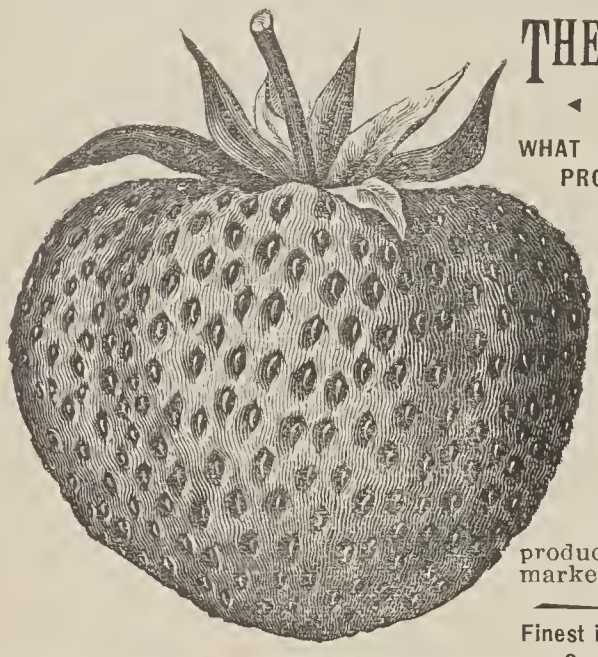
CATALOGUES FREE ON APPLICATION.

P. LAMBERT, Rose Grower, - - TRIER, GERMANY.

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices. TOMAH, WIS.



THE STRAWBERRY

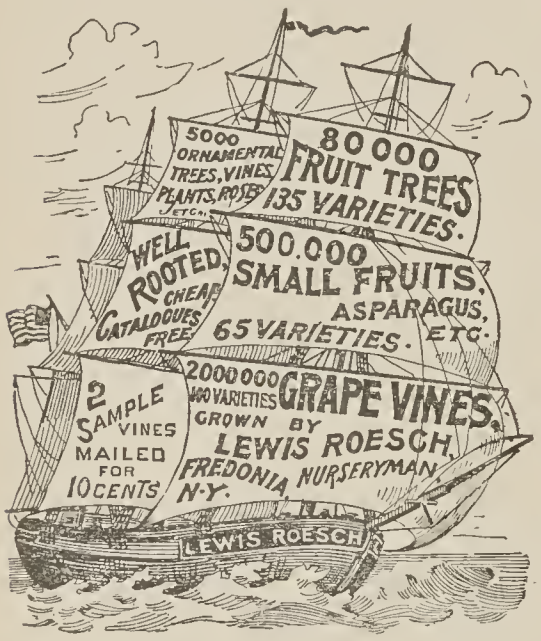
◂ ◂ FOUND AT LAST!

WHAT EVERYBODY WANTS: EARLY: PRODUCTIVE: A SHIPPER WITH A PERFECT BLOSSOM. —To the Trade only, 25 per cent. discount. Your customers will all want this Berry next season. Better send your orders in at once if not already in. This is what the *Rural New Yorker* says Mar. 3, 1894: "**RIO** has been tried at the Rural Grounds and found to be one of the very best of the first early varieties. Large, good quality, productive, and firm enough for market."—VAN DEMAN.

Our Big **6** Collection the Finest in the United States.

Our Farm is on CARY STREET, 3 Miles from **RICHMOND, Va.**

CLEVELAND NURSERY CO.,



STATE OF NEW YORK, CHAUTAUQUA COUNTY. } ss.

Personally appeared before me Lewis Roesch, who, being duly sworn, says that he propagated the above mentioned Vines, Trees and Plants for sale. That they are in prime condition, guaranteed strictly true to name and of size and quality represented in his Catalogue.

LEWIS ROESCH,
Fredonia, N. Y.

Subscribed and sworn to before me, this 10th day of January, 1894.

F. R. GREEN,
Notary Public.

In addition to the fine Cut-leaf Weeping Birch offered last month, I have a good assortment of Plums, first-class medium and half inch; also 5,000 dwarf Duchess Pear, 2 and 3 years; a few hundred Seckel and Clapp's Favorite standard Pear, 1 inch and over, 7 to 9 feet; standard Pear $\frac{3}{4}$ and $\frac{5}{8}$; few thousand No. 2 and No. 3 Peach, plenty of Elberta in the lot; few Mountain and Oak-leaved Ash, and about 2,000 roses.

This stock was raised to sell, and is going to be sold. Prices given with pleasure.

JAY WOOD,
KNOWLESVILLE, N. Y.

LOOK! LOOK! LOOK! LOOK

ROSES! ROSES! ROSES!

HYBRID PERPETUALS, MOSSES AND CLIMBERS.

STRONG TWO-YEAR-OLD PLANTS! OUT-DOOR GROWN!

ON OWN ROOTS, except some of the mosses and certain other varieties, which it is very difficult or impossible to grow from cuttings. These are low budded, on Manetti stocks, and free from suckers.

ALL FINEST VARIETIES.

Ætna Moss, *dark pink*,
Alfred Colomb, *crimson*,
American Beauty, *deep pink*,
Anne de Diesbach, *carmine*,
Baltimore Belle, *cl. blush white*,
Baroness Rothschild, *pink*,
Blanche Moreau, moss, *white*,
Blanche Robert, moss, *white*,
Caroline de Sansel, *flesh*,
Caroline Marniesse, *creamy white*,
Cl. Victor Verdier, *rose*,
Cl. Jules Margottin, *carmine*,
Coquette des Alpes, *white*,
Coquette des Blanches, *pure white*,
Crimson Globe, moss,
Fairy Queen, *white*,
Fisher Holmes, *crimson*,
Gen. Jacqueminot, *crimson*,
Gen. Washington, *red*,
Gloire de Margottin, *crimson*,
Gracilis, moss, *deep pink*,
Henry Martin, moss, *pink*,
Jules Margottin, *red*,
Madame Gabriel Luizet, *pink*,
Madam Plantier, *white*,
Magna Charta, *pink*,
Marguerite de St. Amande, *rose*,
Maurice Bernardin, *crimson*,
Paul Neyron, *deep rose*,
Persian Yellow, *golden*,
Pierre Notting, *deep maroon*,
Prince Camille de Rohan, *crimson*,
Princess Adelaide, moss, *pale rose*,
Queen of the Prairie, cl., *red*,
Salet, moss, *light rose*.

EMPRESS OF CHINA—Our new perpetual blooming climber. To dealers who will make this valuable new variety a specialty with their agents we will furnish plates free of charge. Send for description.

We also have all the choice varieties in other lines. CLEMATIS, ORNAMENTAL SHRUBS and TREES, GRAPES, etc., etc.

All our stock is now stored in our cellars and so we can promise as early shipment as is desired. Write for our prices. We want your trade and will make them right.

JACKSON & PERKINS,

NEWARK, WAYNE CO., NEW YORK.

SEND US YOUR WANT AND SURPLUS LISTS.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing.*

Send for Price-list and Circulars.

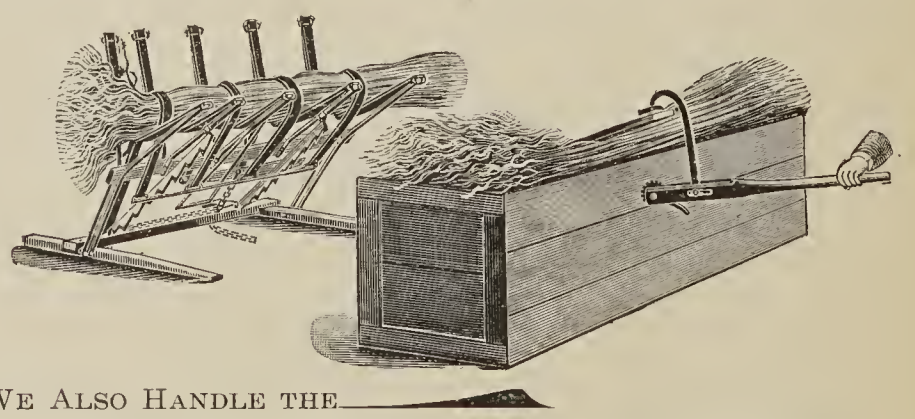
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp.

It is *simple* to use as a *cant hook.* Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Bales, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

NOTICE!

Is hereby given that we are ready to quote "hard times" prices . . . . on . . . .

Apple. Lowest prices ever quoted. BELOW "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for Cherry. Get our prices. . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

Rare Trees

Besides a Fine Stock of Fruit and Ornamental Trees, Shrubs, Roses, Vines, etc., of the Staple Varieties, --we have over 1000 sorts--we offer this season the following RARE TREES:

WEEPING PURPLE BEECH,
" BEECH,
FERN LEAF BEECH,
WORLE'S MAPLE (a beautiful yellow sport of the Sycamore Maple—makes a fine contrast with the Schwedler Maple.)
WEEPING PEA TREE,
" HAWTHORN,
" HORNBEAM,
" FILBERT,
" LARCH,
" LABURNUM,
" LOCUST,
" SOPHORA,

WEEPING NORWAY SPRUCE,
TIGER TAIL SPRUCE,
COLORADO BLUE SPRUCE,
UMBRELLA PINE,
SWISS STONE PINE,
CUT-LEAF NORWAY MAPLE,
GOLDEN LEAF JAPAN MAPLE,
DBL. WHT. HORSE CHESTNUTS,
TREE ROSES, Double Worked—Red and White.
SWEET BRIAR ROSES,
WISTARIA MULTIJUGA. (Bears racemes of flowers 2 to 2½ feet long.)
Old Fashioned Crimson 'PINEYS.'

And Lots of other Trees, etc., equally Rare and Desirable.

If you want any of the above good things or anything else in our line write us.

Address, **W. S. LITTLE & CO.,**

Commercial Nurseries. Rochester, N. Y.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865.

ROCHESTER, N. Y.

Clematis.—Strong plants. Holland and own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh; Fortunii; John Gould Veitch: Lucie Lemoine; Crispa: Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.

Honeysuckle.—Hall's Japan, Monthly Fragrant.

Ampelopsis Veitchii. American Ivy.

Japan Snowball.—Strong, fine plants.

Roses, H. P's and Mosses.—Strong plants, own roots and budded.

Tea Roses.—Fine plants, 4 inch pots.

Tree Roses.—Elegant plants. Lowest price in America.

Oak-leaf Mt. Ash.—Elegant trees. Low price.

Cut-leaf Birch.—8 feet, perfect trees.

Purple Birch.—4 feet, **true purpurea.**

Young's Weeping Birch.—5 feet stems.

Lilac, Weeping Pendula.—5 feet, not budded on lilac.

Hydrangea P. G.—A fine lot of strong plants.

Flowering and Foliage Shrubs.—Fine assortment.

Paeonies.—A grand collection.

Paeonies, Tree.—Nice plants in quantity.

Industry Gooseberries.—3 years. Plants matchless.

Blackberries.—Strong, nicely trimmed to one cane.

Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry.

Grape Vines.—A complete assortment.

Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

Baltimore and Richmond Nurseries.

Japan Pear Seedlings . .

Are the best stock for all sections. They do well on both light and heavy soils. Order a few thousand and be convinced. We use no others. Prices low in quantity. Quotations given on application.

WE WILL EXCHANGE SEEDLINGS FOR SUCH STOCK AS WE CAN USE SPRING OR FALL 1894, SEND SURPLUS LIST.

Peach Pits. . . . .

We have a few Smock Pits of last season's crop, and can offer low to close them out.

OUR ARRANGEMENTS FOR THIS SEASON WILL INSURE A GOOD LOT OF THE FOLLOWING:

Smock, Southern Naturals, Promiscuous,

GET OUR PRICES BEFORE PLACING YOUR ORDER.

We are Wholesale Growers of a . . General Line of Nursery Stock and Invite Correspondence. . . . .

Franklin Davis Nursery Co.,

BALTIMORE, MD.

Millions of Visitors to the **WORLD'S FAIR, CHICAGO,** have admired the splendid collection of Plants exhibited by the **BOSKOOP HOLLAND NURSERY ASSOCIATION, on Wooded Island,** consisting of Magnolias, Roses, Rhododendrons, Azaleas, Phlox, etc., and for which **the highest award, Medal and Diploma, has been granted.**

BUSINESS! BUSINESS! BUSINESS!

I NOW MEAN BUSINESS, and am prepared to accept import orders for Early Spring Delivery, at

Hard-Time Prices.

Send for Special Spring List of

Budded and Tree Roses, Clematis, etc.

and learn of the **SPECIAL OFFER TO DEALERS.**

C. H. JOOSTEN,

3 COENTIES SLIP. NEW YORK.

Agent for the BOSKOOP HOLLAND NURSERY ASSOCIATION.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Stake Labels FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	**inch;**	**1 1-2**	**x**	**5-16**	**inch.**
18	**"**	**1 1-2**	**x**	**1-2**	**"**
21	**"**	**1 3-4**	**x**	**3-4**	**"**
24	**"**	**2**	**x**	**3-4**	**"**
27	**"**	**2 1-2**	**x**	**7-8**	**"**
30	**"**	**3**	**x**	**7-8**	**"**

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. Samples Free.

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

Albertson & Hobbs,

Extensive Growers of

Apple, Peach, Cherry, Plum, etc.

Are prepared to offer to the trade in **Car Load** lots, **APPLE** and **PEACH,** or will car general assortment of other stock.

Also large lot of **APPLE SEEDLINGS, MARIANNA PLUM** stocks, **BUDS,** etc. Special prices on early contracts. . . . . .

Try our new SPADES. See Circular.

Just the thing.—Geo. Peters & Co., Troy, O.
Fills its place well.—W. F. Heikes, Huntsville, Ala.
Just the thing for heavy digging.—Flemer & Felmly, Roscle, N. J.
Satisfactory; strong; stand heavy work.—Taylor, Peters & Skinner, North Topeka, Kan.

Correspondence solicited. Personal inspection courted. Address

Albertson & Hobbs, Bridgeport, Marion Co., Indiana.

Fine Wholesale stock of the two new Hedge plants,
LIGUSTRUM MEDIA, LIGUSTRUM IBOTII,

Splendid stock of RUSSIAN GOLDEN BARKED WILLOW, RED CORNEL, FORSYTHIA SUSPENSA, HYDRANGEA PANICULATA (Type.) WHITE SPRUCE, NORWAY SPRUCE. CLEMATIS PANICULATA, Splendid stock in all grades from extra heavy to mailing sizes

Immense stock of Hardy Perennials, including best varieties of IRIS, PHLOX, PYRETHRUMS, PÆONIES, HOLYHOCKS, LARKSPURS, ETC., ETC. over a thousand distinct species and varieties.

THE READING NURSERY, (Established in 1854.)
JACOB W. MANNING, Proprietor, READING, MASS.

Wholesale Lists ready; write if you have not received one.

1838. **56 Years. 300 Acres.** **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.
Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.
Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.
French, Persian, English, Japan Walnuts.
Pecans, Almonds and Filberts.

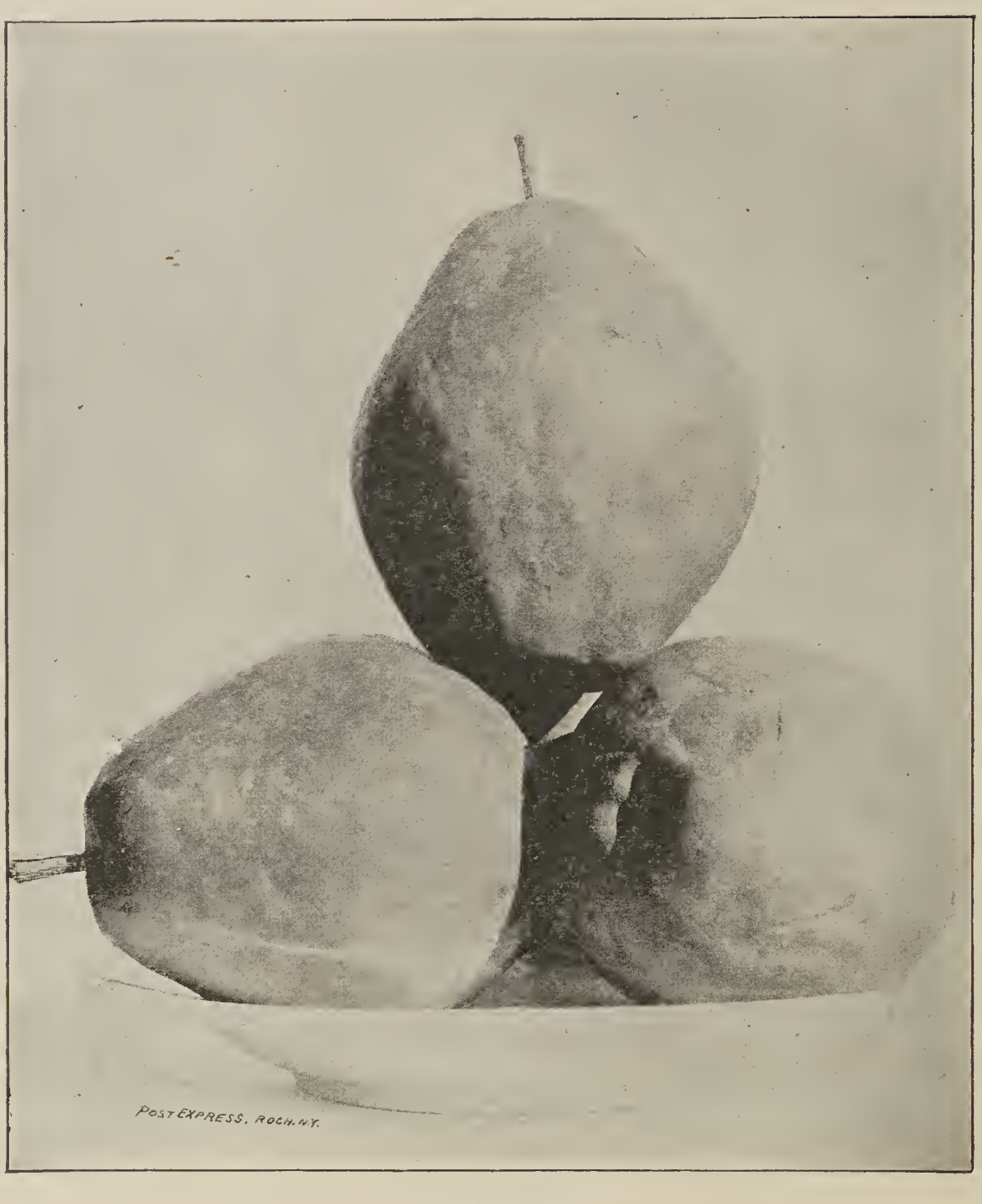
NOVELTIES.

Eleagnus Longipes, Matrimony Vines, Trifoliate Orange, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries and Wineberries, Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES, WILLIAM PARRY, PARRY, N. J.



KIEFFER PEAR.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

U.S. DEPARTMENT OF AGRICULTURE RECEIVED DIVISION OF STATISTICS

VOL. II. ROCHESTER, N. Y., APRIL, 1894. NO. 3.

A WESTERN GROWER'S EXPERIENCE.

The following paper was read by A. L. Brooke, of North Topeka, Kan., before the recent meeting of the Horticultural Society of Shawnee County:

"'Every man has his price.' This sentiment was uttered in my presence a few days ago by a 'down easter.' It is a sentiment I do so thoroughly condemn that I could not help but deny his statement, though he was a stranger to me. But you ask, what has that old saying to do with your subject. Nothing, except that it is companion to some other expressions used by many in connection with nurserymen that are neither flattering nor complimentary. It is true they, as a class of men, are so closely allied with another class—the much-abused tree man—that they, the former, are often made to carry the blame of the oftentimes overzealous work of the latter. Let me only add a word here in defense of the tree man, which is, that to him must be given much of the credit for the fruits that we eat from our gardens and our orchards; for did he not roam up and down the earth, seeking whom he might devour, many of these would be bare of the trees and fruits they now contain.

"The nurseryman occupies a middle place between the fruit gardener—the originator—on the one hand and the horticulturist proper on the other. The man who undertakes to originate, to discover new varieties, is generally of a different temperament from the individual who takes these fruits when known and propagates them for the planter.

"One of the first lessons in our trade is to learn what to grow. It is a healthy indication when we find instead of 'What grows best?' the question, 'What does the country demand?' The active, live grower is constantly keeping this question before him, and as men do in other trades, is trying to supply this demand. Downing says of the propagation of the apple from seed, 'When reared from seeds they always show a tendency to return to a wilder form, and it seems only chance when a new seedling is equal to or surpasses its parent. Removed from their natural form, these artificially created sorts are also much more liable to disease and decay.' This short quotation from this most renowned author of 'Fruits of America' tells you much plainer than can I in many words why fruit trees are reared from buds and grafts instead of from seed. It is not because of its convenience and cheapness but rather from compulsion. To propagate from seed would be too slow and uncertain and must be left to the slow process of the fruit gardener.

"The prime object then is to get good stock for our young shoots whether they be buds or grafts. To get these we go as nearly as can be to the natural or wild state, so as to avoid as much as possible the diseases so prevalent in our country. It has been proven as per example that 'the yellows' in the peach can be readily inherited from unhealthy seed, just as the germ of disease is conveyed to the offspring in the animal kingdom. The great essential then is to keep the stock upon which you wish to propagate healthy. To keep as nearly as possible to this desired state the seed sown generally is the natural. You will understand, of course, that my remarks pertain to fruit trees, and not to small fruits, which latter you well know are propagated in a different manner.

"Having secured then natural stock, we then proceed to get the particular variety desired, either by budding or grafting. In either case it is the aim to get good thrifty scions or buds from the parent stock. Here I wish to relate an anecdote that came to my notice a few years ago in one of our farm journals. The editor who now occupies a high position in another field, gave the nurseryman a good scoring, as he so well knew how to do, for cutting scions and buds from the tree in the nursery row, before the tree had borne fruit and thereby given proof of its correctness, trueness to name. This was truly amusing to that nurseryman who, as a student of nature, knows his trees as he walks among them and can call them by name from their marks, growth and appearance, as readily as can the shepherd name his sheep as he walks among his flock. I will venture the assertion that there are men growing nursery stock in Shawnee county who can name more varieties of fruit correctly from the appearance of the tree than the honorable gentleman referred to can name from the appearance of the fruit itself.

"As has already been stated, the natural tendency of seed is to return to its wild state, and also the improved is more liable to weakness and disease; so are the shoots cut from the branches of an old tree more liable to disease, and the seeds from the fruits of old trees are more prone to go back to their wild or natural state than are the seeds from more vigorous and younger trees. For reasons already advanced I would advocate getting scions from the nursery row, or from trees not long in bearing, of course barring all mistakes in selection of varieties. As eternal vigilance is the price of liberty, so is eternal watchfulness helpful in keeping your line of stock true to name.

"Just what will give success in this western country in securing a good per cent. of a stand in either buds or grafts,

I will not undertake to tell you. It has been the universal experience of nurserymen that when they had gained a complete knowledge by several years of close study and much labor, the following season would only convince them that they were wrong and were just where they stood before making this circle of experience. There are many things that will in a very short time undo what you have spent much time and patient labor to perfect. Perhaps that which has more to do with success than any other one thing is thorough cultivation. First, deep plowing, not six inches, but a foot, if you can accomplish it. Don't plow under clods to torment you the whole season through. It is a good plan when dry to harrow the surface before plowing. Fine dirt is what holds the moisture. Good, thorough, level cultivation is more conducive to good growth of stock than anything else.

"An ardent, enthusiastic man, who, I believe, was a lover of fruit and fruit trees, once told me he planted 80,000 apple grafts out in the northern-central part of the state, and secured a good stand, but when they grew to about eight inches or a foot, all died; the next year 40,000; the next 20,000, when he gave up in despair. He thought they were killed by hot winds. Afterward, seeing an example of his cultivation here in the valley of the Kaw, I knew they were killed by neglect. When it gets so dry and hot in this valley that corn begins to wilt and the farmers begin to complain, then we get the most satisfactory results in our nursery work. The dryer it gets the more thoroughly and the deeper should we cultivate and we will give you a tree with more health and vigor than we can when the rain maker overdoes his job. Too much moisture is not conducive to health and growth in nursery stock. Trees are more liable to disease in wet seasons and insects seem to be more injurious at such times. Those who have lived in the great Basin of Utah and Colorado say they have no trouble from this source and are much more successful if left to furnish all their moisture by irrigation.

"Very many of the failures in orchard planting can be attributed to bad care after planting. Weeds and trees were not made to grow on the same ground at the same time. A great deal of the trouble though can be charged to the bad handling of stock before it leaves the nursery. A careless nurseryman can soon kill what he has spent a long time and much money to mature.

"If trees are taken from the nursery in the fall they should be well grouted as soon as they are lifted from the nursery row, then heeled in, care being taken to carefully pack the dirt about the roots. In the spring the soil is generally more favorable, and the conditions being reversed naturally, better success can be obtained even when less care is exercised.

"When nursery stock is received in a frozen condition, if in boxes and well packed, don't disturb it. If convenient, place in a dark cellar and allow frost to come out slowly. If dry, add water, or if you can bury in moist earth and allow it to remain till perfectly thawed out, then it can more than likely be planted without injury.

"Finally, in closing this paper, I think it can safely be said, that there is no other business or profession which is at times so irksome, and yet so fascinating; so liable to disappointment and yet so promising; so useful and yet at the same time so much blamed for treacherous dealings. The dollar made in the nursery business is a very uncertain one up to the time it is safely in the pocket and it is seldom crowded for room when once there. Nurserymen as a class are honest, and try very hard to give a dollar's worth for every hundred cents you pay. They generally sell you true to name though the cases are numerous when the opposite has been done. A great many people have been fooled so often that they buy with no idea of getting anything other than what is given them. It is true a great many men are like children, they want what they should not have. One man asked me for Early Harvest and when assured that he could not get the tree, looked at me with an amused expression, saying that it would be no disappointment to him not to get them, as he had bought and planted twice before and both times got something else instead.

"The man who would give me a thorn for a rose; a peach tree for a flowering almond; a winter sort for a summer variety, I would drive from my door as rudely as I would him who would steal the bread intended for my children. He not only gives me what I do not want but robs me of valuable time that can never be regained."

ADVICE TO THE PLANTER.

It is natural that hardy trees and plants should be in demand; and the fruit-tree fakirs are quick to take advantage of this, and "work" the trade for all there is in it, says Professor S. C. Mason in the *Industrialist*. "Prove all things and hold fast that which is good," does not mean buy every new "iron-clad" that is offered at four prices. The latest thing that the tree-peddling gentry are offering to a needy public is the peach budded on "Canadian stocks," whatever those may be, with the assurance that the sap in such trees "goes down" when winter comes, presumably so deep as to be out of reach of such sudden cold snaps as the one lately experienced. The modest price of fifty cents per tree, one-half down and the balance the third year, provided the trees bear, will doubtless find many takers. The lamented showman, P. T. Barnum, proved himself a great philosopher when he said that the American people like to be humbugged. That the average American farmer is not entirely behind the rest of his countrymen in such matter is proved by the number of "frost-proof" "blight-proof," "drought-proof," and otherwise indestructible nursery material the agents are able to take orders for.

ARBORETA.

The term arboretum as now understood, is a classified collection of trees and shrubs. Both the idea and the word used to express it are modern. I cannot find that Loudon used it in 1834, although he planted the Derby arboretum about 1840. He failed to make it eminent for arboreal beauty, as almost all others have failed in like attempts. The old arboretum at Kew Gardens was planted without any classification, it was simply a rare collection of trees. Now, however, I find, by Sir Joseph Hooker's letters, the new arboretum is progressing, and, as I understand, is being planted in classes — whether these classes are divided into groups, orders, or genera, I have not learned, but it is upon the very material differences produced by these varieties of grouping that I desire to say a few words.

The trouble with nearly all classified collections of trees shrubs or plants that I have seen is, that professors have endeavored to treat the living, growing materials as though they occupied the cases of an herbarium or the pages of a book. The result is usually most unmitigated ugliness. My old time friend, Mr. Thomas Meehan, as I understand him, does not believe in classification, a very natural feeling for a member of the Kew league mentally comparing the herbaceous grounds with other portions of the Royal Gardens. Professor Sargent says, "Of course an arboretum could be made much more beautiful, if no attention was paid to the scientific grouping of species, genera, and families." This is partly true; it is impossible to construct beautiful groups upon any such foundation as species or orders; the basis is mostly too narrow.

But—"the most perfect arrangement of species in regard to variety, would be to employ"—a selection adapted to the purpose and climate="and arrange them according to the natural system. We (Loudon's Ency.), have already suggested that grounds might be wooded in this way, so as to obtain a maximum of variety and beauty." Yet when Loudon assayed to do it, he found as others have found, that it is easier to plan on paper, than to plant effective grounds. One or two excellent landscape gardens have long ago pointed out the futility of expecting to obtain public interest for these hide-bound lineal arrangements, which have been stubbornly adhered to since the very first attempts to plant physic gardens.

The evolution of the arboretum in the United States is quite interesting. The so-called Bartram Garden is the earliest attempt whose ruins I have examined. There is a line of oaks, but so far as I could see, no other sign of classification. I fancy Mr. William Saunders of the Department of Agriculture, is the father of the modern arboretum in this country, and although he was badly handicapped for want of space, yet twenty years ago when his trees were small, they were exceedingly instructive, pointing the way to extract beauty out of a collection designed for instruction. It was easy to see that their future would depend upon selection. It was equally evident that the method of grouping the large trees on the margins, and the shrubs in front of them was in good taste, but it was quite difficult to find whose particular system was followed. I should think, however, with the abundance of species to select from, that the aspect of the generic grouping (properly thinned) must still be good, for the lineal arrangement of the genera was quite frequently interrupted, for the sake of effect.

Another style of arboretum on quite another plan, was one I examined some years ago at one of the large Rochester nurseries. It might be termed an "arboretum walk." It was simply a straight row of the species of trees used in trade in that climate, legibly labeled. So far as I remember, there was but little attempt at classification. I have not seen the larger arboreta lately planted or designed—but I am informed that their character is that of an "arboretum drive." Of course those who drive to see an arboretum, will leave it with but very superficial ideas, and those poor enthusiasts who walk along five miles of road to examine constantly recurring forms, with but slight points of differentiation, would not, I should think, often repeat their visit. It must be frightfully like going along nursery rows, to walk along a road such as I have seen described, with a row or two of trees on either side. Such a conception is a distinct retrogression, and I notice it only to avoid it.

The conspectus of the genera plantarum gives some 24 groups containing trees and shrubs hardy at the North and containing varying numbers, of sufficiently varied aspect for the formation of harmonious masses. Each group may be a selection from a series of large or small orders. Within the limits of such group, the fancy of the designer should have free play. In such a way as this, botanical classification, and either gardenesque or picturesque beauty may find a happy meeting ground. Many groups contain trees and shrubs of many sorts and sizes, such as the rose alliance, for example, which includes the legumes, hydrangeas, witch hazels, etc., as well as the rose family; enough in itself to plant a large extent of ground, if all were used. There is very rarely a want of variety; the rule is quite the other way, and selection becomes quite imperative.

In methodical planting, no two groups can be alike, there can be no promiscuous effects, and as Mr. Meehan once remarked, "The student can find the plants when he wants to do so—without traveling five miles, more or less, in a buggy, or maybe beneath the broiling sun."

I have given this matter much study from boyhood up, for my grandfather planted many groups after the Jussieuean classes 70 or 80 years ago, and those groups very distinctly convinced me that they were infinitely more ornamental than any lineal arrangement I have seen, comprising as they did the best selections available from both trees, shrubs, and herbaceous plants. So great is the difference of effect obtained by simply extending the basis of a group from the

order to the series or alliance of orders, that I am continually astonished to find professional men blind to it, and can only account for it by supposing they can see little pertaining to grouping beyond the cases of their herbariums, their card catalogues, and the ordinal sequence of their books.

JAMES MACPHERSON.

Trenton, N. J.

STERILITY OF PEAR ORCHARDS.

The U. S. Department of Agriculture is preparing a bulletin on the work of Special Agent M. B. Waite in Rochester, Brockport and Geneva, N. Y., last fall on the subject of sterility of pear orchards. These conclusions are drawn: Many of the common varieties of pears require cross-pollination, being partially or wholly incapable of setting fruit when limited to their own pollen. Some varieties are capable of self-fertilization. Cross-pollination is not accomplished by applying pollen from another tree of the same grafted variety, but is secured by using pollen from a tree of a distinct horticultural variety, i. e., which has grown from a distinct seed. Pollen from another tree of the same variety is no better than from the same tree. This failure to fruit is due to the sterility of the pollen and not to mechanical causes. The impotency of the pollen is not due to any deficiency of its own, but to the lack of affinity between the pollen and the ovules of the same variety. The pollen of two varieties may be absolutely self-sterile and at the same time perfectly cross-fertile. The state of nutrition of the tree and its general environment affects its ability to set fruit either with its own pollen or that of another tree. Bees and other insects are the agents for the transportation of pollen. Bad weather during flowering time has a decidedly injurious influence on fruitage by keeping away insect visitors and also by affecting the fecundation of the flowers; conversely, fine weather favors cross-pollination and the setting of fruit. Pears produced by self-fertilization are very uniform in shape. They differ from crosses not only in size and shape, but also in some cases in time of maturity and in flavor. Among the crosses the differences were slight or variable, so that their variations are not to be ascribed with certainty to differences in pollen. Self-fecundated pears are deficient in seeds, usually only having abortive seeds, while the crosses are well-supplied with sound seeds. Even with those varieties which are capable of self-fecundation the pollen of another variety is prepotent, and unless the entrance of foreign pollen be prevented the greater number of fruits will be affected by it, as shown by the study of Buffum pears. The normal typical fruits and in most cases the largest and finest specimens either of the self-sterile or self-fertile sorts are crosses.

Practical conclusions: Plant mixed orchards or at least avoid planting solid blocks of one variety. It is not desirable to have more than three or four rows of one variety together, unless experience has shown it to be perfectly self-fertile. Where large blocks of trees of one variety which blossomed well have failed to fruit for a series of years without any apparent reason, it is exceedingly probable that the failure is due to lack of cross-pollination. The remedy is to graft in other varieties and supply foreign pollen. Be sure there are sufficient bees in the neighborhood or within two or three miles to properly visit the blossoms. When feasible endeavor to favor insect visits to the blossoms by selecting sheltered situations or by planting windbreaks."

Referring to the experiments in Rochester, Mr. Waite says: "These experiments were carried on in the large variety orchard of Ellwanger & Barry, within the limits of the city of Rochester. Every facility for making them was kindly afforded by the proprietors. Without this fine collection, many trees of which were planted years ago, and the generosity of the owners in placing it at our disposal, the number of results possible would have been very much smaller. This pear collection, which was the pride of the late Patrick Barry, probably contains more varieties than any other in America. On a few acres of ground there are here to be found about all the pears commonly cultivated in the United States and many of the rarer ones. It is scarcely necessary to say that the trees have received intelligent and excellent cultural treatment, and were, with very few exceptions, in fine condition. The orchard was reached May 7th, before the flowering began. The blossoms commenced to open May 14th; on May 15th, the earlier-blossoming varieties were about one-fourth out and the others beginning to open, and on May 16th all but a few exceptionally late-blooming sorts were well in flower. Paper bags were put on a large number of varieties on May 16th-17th, just before the flowering. On the latter date it was necessary to remove an occasional opened flower in order to include in the bags only unopened buds. A greater number of experiments were made here than at all the other places together, the general result being in accordance with those secured before. The Bartlett pollen was found to be almost but not absolutely sterile in producing fruits on stigmas of its own variety, and very much inferior to other varieties, but was shown to be perfectly good pollen when applied to other varieties. Of the forty varieties worked on, about two-thirds were nearly or quite sterile to their own pollen. It was found that other varieties, such as Clairgeaux and Lawrence, were even more completely sterile to their own pollen than was the Bartlett.

There were two especially new features developed by the Rochester series aside from other points, (1) that the Bartlett and Anjou are not absolutely sterile to their own pollen, but under favorable conditions can set a few fruits under its influence; that Angouleme, Seckel and other varieties which seem self-fertile were not always as productive when limited to their own pollen as when cross-pollinated."

PROFESSOR L. H. BAILEY.

The subject of this sketch is known throughout the United States and Canada as one of the foremost authorities upon horticultural subjects. He was born at South Haven Mich., in 1858, opposite Chicago, in the famous Michigan fruit and peach belt. He was reared in the fruit business. He graduated at the Michigan Agricultural college in 1882 and for two years was assistant to the late Asa Gray at Harvard, the greatest botanist of America. In 1884–8 he was professor of horticulture and landscape gardening at the Michigan Agricultural college. He spent a part of 1888 in Europe. From 1889 to the present time he has been professor of general and experimental horticulture in Cornell University.

In 1886 Professor Bailey was one of a party of botanists to explore the botanical features of Northern Minnesota under the auspices of the Minnesota Geological and Natural History Survey. The first botany he ever saw was Gray's Field, Forest and Garden botany, when a lad. This gave him a start. He is now employed by the trustees of Harvard University to revise this book. Professor Bailey has had a good deal of journalistic experience. He was for one winter a reporter in the legislature of Illinois. He is now secretary-treasurer of the World's Horticultural Society. Professor Bailey has written many articles for the horticultural journals of the country, has read many papers at society meetings and is the author of many reports, bulletins and monographs. He was late editor of *American Gardening*. He has published a number of books of great value to horticulturists and nurserymen, among which are the following: "Annals of Horticulture for 1889, 1890, 1891 and 1892," "The Horticulturists Rule-Book," "The Nursery Book," "Cross-Breeding and Hybridizing," "American Grape Training," "Field Notes on Apple Culture," "Talks Afield."



PROFESSOR L. H. BAILEY.

WASHINGTON FRUIT CULTURE.

C. H. Ross of the state of Washington is a thoroughbred pioneer. He was born in a prairie schooner on top of the Blue Mountains of Oregon in 1851 while his parents were enroute to the Pacific coast. He has watched the development of the West with peculiar interest. In a paper before the recent fruit growers' congress at Spokane he said that this is essentially a fruit age. Wheat, cotton and corn have each been king but now fruit is king. "From carefully prepared statistics said he, we find that Washington, at the end of the planting season of 1894, will have not far from 45,000 acres in fruit, which will produce about 20,000 tons. In this Whitman county takes the lead, and will produce about 400 carloads: Yakima, 200; Clarke county, 170; Lewis county, 100; Kittitas 90; Thurston 90; Pierce and King county are largely devoted to small fruits and market gardening; the other counties varying from ten to sixty carloads each. In the matter of dried fruit, Clarke takes the lead and will produce about 35 carloads. In peaches, Whitman and Yakima counties will lead, Whitman having about 20,000 trees in bearing. It is estimated that about one and one-half million of trees will be planted this season. With these facts and figures before us, what may we expect in the next few years? Doubtless thousands of carloads of fruit will be shipped from this state."

Mr. Ross handles the tree peddler without gloves. He says: "While our trees are comparatively free from insect pests it requires the utmost vigilence to keep out pests which are being shipped in from other states. This part of our work is a matter of great importance. The state of Massachusetts spent $350,000 for the destruction of a single pest known as the gipsy moth. Among all the pests we have to contend with, perhaps one of the most injurious is the eastern fruit tree peddler who comes to us with his oily tongue and beautiful pictures of imported fruits. When the goods are delivered you find the size and quality both inferior and that you have paid four prices for a lot of trash. We have several insect remedies, among others the lime, sulphur and salt wash. The foreign fruit tree peddler being about the worst pest we have to contend with, we would recommend this solution applied with the Bean pump."

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., APRIL, 1894.

DISEASED NURSERY STOCK.

Regarding the quarantine by the state of California against trees infected with insect or fungous pest, it may be stated that the object of the law is primarily to prevent the importation of fruits, trees, shrubs, plants and seeds from Europe, Australia, China, South Sea Islands, South and Central America. But it is a fact that the law has been made to apply to trees and shrubs shipped into the state from the eastern states. Alexander Craw recommends that fumigating houses be established at such railroad stations as receive shipments of fruit trees and fruit packages. Judge McKinley has pronounced upon the validity of the California quarantine law. It is believed by conservative fruit-growers in California that the importance of such regulations in certain other states cannot be overestimated and that Florida especially needs some such quarantine law. Although the climate of California and Florida differs from that of the northern states, and the West Indian and South and Central American species imported will in many cases not spread to the northward, there are still a number of species which, though tropical or subtropical in origin, are potential pests of temperate regions as well. The whole country therefore is more or less interested in this question.

That there have been determined efforts to cope with diseases in nursery stock in the East as well as in the West is evidenced by the extensive report of D. G. Fairchild assistant pathologist of the United States Department of Agriculture. Mr. Fairchild conducted a series of experiments at the great nursery center of Geneva, N. Y. Much of value to nurserymen of the country was deduced from those experiments and encouragement was given to continue the investigation. The production of sound nursery stock is the aim of all reputable nurserymen. The laws which are being formulated in various sections of the country will require, and the interests of the grower and dealer in nursery stock will demand the best that can be produced.

AMERICAN ASSOCIATION MEETING.

The nineteenth annual meeting of the American Association of Nurserymen will be held at Niagara Falls on the first Wednesday in June. It is expected that there will be an unusually large attendance. Every effort is being made to insure a successful meeting. There have already been promised papers and discussions by William C. Barry, P. J. Berckmans, Professor L. H. Bailey, Irving Rouse, C. L. Watrous, N. H. Albaugh, S. M. Emery, Charles Little, Charles A. Green, George A. Sweet. This list will be extended. The conditions of the nursery business in the East, West, North and South will be discussed by prominent nurserymen from each of those sections. It is expected that reduced railroad rates will be secured. The location is comparatively central and all nurserymen should make a special effort to attend. The membership fee, $2, should be sent at once to the secretary, George C. Seager, Rochester, N. Y.

AMONG other subjects which the Northwestern Nursery Association, recently formed, will take up are the study of climate conditions in the different sections of the Northwest, the soil and its adaptation to certain fruits and the best methods for the extirpation of the fruit pests from the nurseries, which are becoming more and more numerous every year. This association will be a valuable aid to the boards of horticulture in each of the states included, for the purpose of introducing into all orchards clean, healthful and vigorous trees. An important work before the association is to expose any firm which is careless in filling orders with inferior stock, or in mixing varieties so that labeled trees are not true to name.

THE statement of E. F. Babcock in another column regarding the effect of insects upon the fruit crop of the country during the last two years, while but one of many calling attention to the results of this pest, is of particular interest by reason of his opportunity to observe the general effect. Mr. Babcock urges that legislative action be taken at once to protect the orchards of the country. He cites the summary manner in which efforts are being made to stamp out tuberculosis among cattle, whole herds falling under the knife of the state inspectors, and suggests that similar determined action be taken with reference to diseased orchards.

THERE are lively reports of the progress of orchard planting in Colorado. Evidently the nurserymen have been

talking with the planters of that state and vice versa. And the planting has not been confined to the orchardists of Colorado, for many have crossed its borders from other states and have established orchards and nurseries.

Reports from various sections of the country are to the effect that the peach crop has been jeopardized by the frosts which have followed long seasons of warm weather. If the buds have not already been injured there is much reason for the belief that they will be before all danger of frost is past.

TO MAKE IT CRIMINAL.

Horticulturists of the state of Washington propose the following as a state law: "Any person or persons who shall sell, offer for sale, distribute or give away any tree or trees, root or roots, grafts or scions, infested with the injurious insect popularly known as woolly aphis (lanigera) shall be guilty of a misdemeanor, and on conviction shall be fined not less than twenty-five dollars nor more than two hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than one year." Also a similar law regarding scale.

LEGISLATION ON INSECTS.

In an address before the Fruit Growers' Convention of the Pacific Northwest a few days ago, E. F. Babcock said: "Six months as judge at the Columbian Exposition, and a daily, yes, hourly critical examination of some one of over fifty states, provinces and foreign countries assigned to me, has left an indelible impression of the vast extent of the ravages of the various insect pests, and the conviction upon my mind that something must be done to destroy these pests or that we shall be compelled to abandon the cultivation of our orchards and vineyards. Washington, Oregon, Idaho and California were assigned to me and I was pleased to note that they were less affected than any other section, but I also noticed the evidences that they were here but very slightly on the specimens shown. In my native state, New York, when I commenced to learn my business over forty years ago, their ravages were comparatively unknown. The fruit was uniformly fair, clean and smooth, and she was known and acknowledged to be the greatest fruit state in the Union; one of her counties, Niagara, having, a surplus of over 1,000,000 barrels for export for years. This year from the reports we learn that her product is less than seventy-five thousand barrels; not sufficient for her own consumption. Pennsylvania is about in the same condition—no better. Ohio, which was at one time not far behind, which had millions of barrels for export, was not represented at the Columbian Exposition; was unable to get together enough to make a respectable showing. Indiana, which in former years was a close second to any of the great fruit states, came in with a small collection; less than one-tenth in number of varieties she was able to show in former years. Those who saw the fruit from Illinois during the Exposition, could not fail to notice the great destruction from the insect pests of the fruit shown on her tables, and could fairly infer from what was shown the character of that left behind. Missouri, which had a crop worth over ten millions of dollars two years ago, and which made such a splendid show of her fruit at the World's Fair, New Orleans, 1884–'85, was unable to show one-fourth of the number of varieties at Chicago. Her crop has been estimated at one-twentieth of that of two years ago.

"I do not wish to be understood as saying that this condition was entirely due to the ravages of the pests, for there were other causes, in some instances exhaustion of soil, drouth, climatic conditions, etc., but I do say that the leading cause of these failures was from ravages and destruction by insect pests. It is needless to go further; it was practically the same through all the states."

JAPANESE PLUMS IN IOWA.

In connection with what was said at the annual meeting of the Western New York Horticultural Society, the following communication to *American Gardening*, from A. B. Dennis, Iowa, is of interest: "I have a large collection of Japanese plums, possibly the largest in Iowa, and think I have given them a more extensive and careful test during the past five years than anyone in the state. My seventy trees include Burbank, Ogon, Satsuma, Yellow Japan, Bailey and one or two unnamed varieties. All of them came through the last winter, which Professor Budd said was the most severe on tender trees and nursery stock we have had in twenty years, without harm, and several trees bore heavy loads of fine fruit the past summer. I am satisfied the Ogon and Burbank will stand this climate to perfection, and that at least some of these Japanese plums will prove more satisfactory in this latitude than any European sorts ever introduced in Iowa. I should not advise extensive planting in this climate, except for experimental purposes. Crosses of these Japanese plums with our natives may give us valuable varieties. I have within the past few days received scions of 51 varieties of Japanese plums and their seedlings. I shall test them on my ground, and hope for good results from some of them at least. I have also a collection of 50 varieties of our best natives, and on the improvement of these I build my hopes for best success in plum culture in this trying climate."

ADVERTISEMENT SOLD 100,000 PLANTS.

J. W. Cogdall, Springfield, Ill.—"Enclosed you will find $5 for two months' advertisement and National Nurseryman for one year from date. The advertisement sold principally all my 100,000 plants in the last two months."

Among Growers and Dealers.

George A. Sweet of Dansville, N. Y., has returned from California.

Z. K. Jewett is vice-president of the Horticultural Society at Sparta, Wis.

Virgil Popham, New Fruit, Ky., is revising his directory of nurserymen, florists and seedsmen.

George S. Josselyn says that while grapes were cheap last year, they paid better than farming.

J. C. Vorce, recently of Trinidad, Col., has started a large nursery near Whitewater, Mesa county, Col.

P. M. Koster of the Hollandia Nurseries, Boskoop, Holland, will visit this country in April and May.

Dall DeWeese of Canon City, Colo., will put 100 acres of new land into orchard and nursery stock this spring.

D. M. Ketchum, Erie, Pa., is preparing a directory and reference book for the use of growers and dealers in nursery stock in the United States and Canada.

Justin A. Goodhue of the Utah Nursery Co. will plant with Herman Baer in Delta county, Col., this year, 160 acres to large fruit and 32,000 vines and plants.

W. R. Gibson, nurseryman, of Emporia, Kan., will plant an eighty acre orchard and nursery near Catlin, Col., this spring. The nursery stock will be planted between the rows of apple trees.

S. W. Morris and F. M. Widner have opened a nursery business at Corning, Ia. D. O'Mara is in the nursery business at Hackensack, N. J. H. Merkel has severed his connection with the Spring Lake Nursery Co., at Spring Lake, N. J.

An application for the appointment of a receiver to wind up the affairs of the Alliance Nursery company of Rochester, N. Y., was made in the supreme court last month, arising out of a disputed title. The company was formed last September by John B. Ireland, Dorr M. Ketchum and Hendrick V. Hobbie.

G. J. Carpenter & Co., nurserymen, of Fairbury, Neb., will this season plant eighty acres near Palisade and forty acres near Fruita, Mesa county, says *Field and Farm*. This will increase their orchard ground in Colorado to 350 acres. In course of time they expect to have one of the largest commercial plantations in the state.

A. S. Wills writes from Phoenix, Col., to the *Field and Farm*: "The business of the nurseryman is in a most prosperous condition, and more acreage is being planted up to date this spring than any one season in the history of the Salt River valley. The Rio Bonita nursery company disposed of over 100,000 assorted trees covering 1,100 acres. The record of this firm alone shows that eighty farmers have planted the Thompson seedless grapes in patches of from one to three acres each."

From Various Points.

There is invested $800,000 in the culture of the prune in Idaho.

A. C. English and F. S. Coolidge have planted 2,400 apple, peach and pear trees on the Olio mesa near Farmington, New Mexico.

It is thought that forests and shelter belts will make Southern Minnesota and South Dakota adapted to large and profitable orchards.

The Minnesota State Horticultural Society has recommended for trial the following seedling apples: Patten's Greening, Okabena, Hotchkiss, Peerless.

The seedsmen of the country have been asked to sign a petition asking Congress not to transfer to the free list garden seeds which are now on the 20 per cent. list.

Recent exhaustive experiments show that on the whole the Bordeaux mixture remains the best fungicide, and Paris green and London purple the best general insecticides.

Crimson Galande, Royal George, Dagmar, Dymond, Golden Eagle and Bellegarde are named as the six best peaches by S. T. Wright in *The Gardeners' Magazine* of London, England.

J. D. Hazen of Leona, Brown county, Kansas, has 10,300 apple trees planted. Seven thousand of the number are Ben Davis, 2,000 are Winesap and 1,000 Genet. Western Kansas people are beginning to believe that some day they may grow some fruit.—*Field and Farm.*

It is reported that General G. Andrade of San Francisco and parties representing French and Scotch capitalists have been visiting the mouth of the Colorado river for the purpose of selecting a place where they can locate a colony of French grape growers and wine-makers of 1,000 families.

One of the largest orchards in California is to be planted in the Yakima Valley this year, at which time 107,000 trees will be set out. The orchard will cover 1,300 acres and will be planted principally with apples and prunes, although 100 acres will be set to pears and peaches and 200 acres to grapes.

The American Carnation Society at its annual meeting in Indianapolis elected: President, Eugene Dailledouze, Flatbush, N. Y.; vice-president, E. G. Gillett, Cincinnati; secretary, C. J. Pennock, Kennett Square, Pa.; treasurer, C. H. Allen, Floral Park, N. Y. The society has 144 members. The fourth annual meeting will be held in Boston.

After a three months investigation of the prospects for fruit growing in Colorado, A. S. Temple, an experienced horticulturist of New Jersey, says he believes that a comparatively few years will see Grand valley from Glenwood Springs down to Fruita lined with orchards and fruit gardens, which, with proper care and cultivation, will yield at least $200 an acre net profit.

The Wellhouse orchards, owned by the "Apple King" of Kansas, cover twelve hundred and thirty-seven acres. Four hundred and thirty-seven acres only are in bearing, and from this portion the sales of last year amounted to one hundred and forty thousand dollars, leaving a net profit of eighty-eight thousand dollars.

Secretary Morton has created a new division in the Weather Bureau to be known as the Division of Agricultural Soils. Prof. Milton Whitney has been appointed chief of the new division. The purpose of the new division is to pursue investigations of an analogous character—carrying the climatic observations of the Weather Bureau *into* the soil, where the moisture effects its work and makes its influence felt upon the plant life.

WHAT TREES SHOULD BE PLANTED.

W. H. Ragan, secretary of the Indiana State Horticultural society, says: "Mr. Charles W. Garfield, of Michigan, than whom there is no better authority, said at the recent meeting of the Illinois State Horticultural Society: 'A number of years ago I advocated and stuck to it, that there was no other way in which trees should be propagated, except by the piece root system. After I went out of the nursery business I thought the only way on earth was the whole root plan, and a little later I advocated fully as strong crown grafts, and now to save my life I cannot tell you which I would prefer, but am satisfied with a tree that is well grown.' Now here is all there is of a vexed question, save the advertising dodge. The tree that is well grown will by necessity be a good tree and will have a good root notwithstanding it may have been grafted on a whole or a piece root, or it may have grown from a rooted cutting."

RECENT PUBLICATIONS.

Of making books there is no end and the entire English speaking world may well be thankful that there was encouragement in this prolific age of literature to design and execute the production of what stands at the head of all that has been issued from the press at the present day—the Standard Dictionary. The magnitude of the undertaking precludes the possibility of a description within ordinary limits which would do it justice. The work has been four years in preparation and nearly 1000 experts in all the lines known to man have been employed in its production. It is a work in which absolute accuracy of detail is essential. The plan upon which it has been constructed leaves not the slightest room for doubt as to its claim to the title of standard; it will become the highest authority at once. There have been good dictionaries; there have been improvements on the old; but until now there has been lacking a work which would satisfactorily answer every question put to it. A million dollars have been expended in its production. Its completeness is attested by the fact that it contains nearly 75,000 more words than the Century, which has 100,000 more than Webster. A staff of 247 editorial writers, including doctors of divinity, doctors of medicine, and professors of all the arts and sciences, compiled the information which was gathered from every source, the hundreds of assistants including some as far away as Australia, India, Natal and the Cape. The Standard is not a revision of an old dictionary. It is really a new work intended to take its place as the leading dictionary wherever the English language is spoken. The Standard has many special features, all of which make it superior to any other. Among these are the following: The etymology is placed after the definition; in the definition of words the most common meaning is given first, order of usage being given preference over historical order; the scientific alphabet prepared and recommended by the American Philological Association and adopted by the American Spelling Reform Association is used in the pronunciation of words; the quotations are located; disputed pronunciations were referred to a committee of fifty philologists in American, English, Canadian, Australian and East-Indian universities; there are nearly 5,000 pictorial illustrations made expressly for this work, including several full-page lithographs by Prang; the compounding of words has been reduced to a system; the vocabulary is extraordinarily rich and full. The work is, in short, a magnificent triumph of patient, laborious painstaking, a monument to American industry. It will prove of vast service to all who cultivate the literary arts on either side of the Atlantic, and its cost, which is consistent with the reputation of the publishers for producing valuable works at a minimum price, places it within the reach of all. At no previous time have the conditions been such as to make possible such a work. The Standard Dictionary has more than fulfilled the promises of its compilers. New York, London, Toronto: Funk & Wagnalls Company.

A valuable little book of 228 pages is that entitled "How to Grow Cut Flowers," by M. A. Hunt, of Terre Haute, Ind. It is a compilation of facts concerning greenhouse work, of inestimable value to the amateur and of no little interest to the professional. It is founded upon the experience and observation of a lifetime. The book treats, in thirty-nine chapters, of greenhouse construction and heating, soil, ventilation, mulching, watering, shading, grading, packing and preservation of flowers, insect exterminators and many other subjects. Terre Haute: M. A. Hunt.

The twenty-sixth edition of the catalogue of Meehan's Nurseries at Germantown, Pa., is one of the most complete and carefully prepared that come to our table. These nurseries present a large list of deciduous trees and shrubs among other lists. The catalogue is a recognized authority on this class of nursery stock.

Botanists were interested during the winter by the issue of a pamphlet on "Sugar Maples and Maples in Winter," by William Trelease, reprinted in advance from the fifth annual report of the Missouri Botanical Garden at St. Louis.

A GREAT LIBRARY OF PLANTS.

Comparatively few persons have a clear conception of the nature and magnitude of the science of plants. Prof. Appleton Park Lyon of New York city is one of the few. From his boyhood he has been an ardent student of nature and the sciences. The importance of the vegetable kingdom impressed him at the beginning of his studies, and as a result of his diligence and researches in that particular field he now possesses probably the most unique library of botanical literature in the world.

It is not generally known, says the New York *Times*, that there is in New York to-day, in Prof. Lyon's house, 47 East Forty-fourth Street, a pictorial library, or encyclopedia, of plants, consisting of more than 265,000 pictures, with descriptive text. This is the largest collection of the kind known to be in existence, and when the proposed Botanical Gardens are established in this city, this mammoth cyclopedia of itself is likely to give it character and a world-wide interest. The formation of this remarkable collection, which may properly be termed Lyon's Mammoth Botanical Encyclopedia, has been a labor of love. Prof. Lyon, assisted mainly by his wife, has devoted nearly a dozen years, and has expended a small fortune in its preparation. The work has been thorough, systematic, and laborious. More than a score of years of enthusiastic study of plants in their various relations to each other and to man has enabled Prof. Lyon to perform this self-imposed task with a rare degree of intelligence. Some idea of the extent of the collection may be obtained from the fact that, should a vigorous and active person undertake to examine it in detail, giving, say, two minutes to each classified subject, that person would be obliged to work eight hours a day for over three years, without any intermissions for luncheon.

The purpose of the collection is to afford an available reference library, showing the character, habits, localities and uses of plants—something that completely comprehends the science of plants. It is provided with an alphabetical index so thorough a layman can readily and quickly find anything for which he may be looking. The index is arranged for common as well as scientific names.

In speaking of this great encyclopedia the other day Prof. Lyon said: "The Pictorial Library, or Cyclopedia of Plants, had its origin in this way: I had taken a sort of pride in having a kind of library from which I could answer questions of all kinds immediately at any time. But I found that frequently people wished to see pictures of plants. Hours would perhaps be spent in consulting books in the endeavor to find the desired illustration. No work existed that was satisfactory in this regard. There were thousands of illustrated works, but nothing at all complete. I decided to make such a work for my own use and for the use of my friends. I began collecting additional pictures of plants from every possible source. After a few years spent in collecting material, the question of classification came up. It was difficult to decide upon just the right scheme. There were various classifications of plants given by different botanists. About this time the celebrated classification of Bentham and Hooker was completed in several large volumes. The learned authors, Bentham and Hooker, had been laboring for years upon this work, with all the advantages of the Kew Gardens, near London. Their classification—the result of twenty-one years of revision—is regarded as more nearly a standard than any other, and it was taken as a standard by me"

Prof. Lyon has received aid from a variety of sources in this work. Contributions have been received from publishers of various botanical, horticultural, and kindred papers, as well as from private individuals. In the preparation of the material secured, covers were torn from books and pamphlets, and the leaves were taken to binderies and trimmed. The material was then assorted, the names of the plants were carefully determined, and the classification made according to the natural or family arrangement. The plates, cuts, and reading matter from many important botanical works have been put into Prof. Lyon's collection. Many hundreds of handsome volumes, richly illustrated with colored plates, have been cut up to feed this mammoth cyclopedia. Sets of books costing $25, $35, $75, and even $140 have contributed their illustrations. Following are the names of some of the standard works used: Meehan's "Flowers and Ferns of the United States," "Sertum Botanicum," Maund's "Botanic Garden," Loudon's "Cyclopedia of Plants," Loudon's Cyclopedia of Trees and Shrubs," Loudon's "Arboretum and Fruticetum," Paxton's "Botanical Magazine," Paxton's "Flower Garden," Hooker's large work on ferns, Hill's "Eden," Loddige's "Botanical Cabinet," Baillon Edward's "Botanical Register," and all the ordinary botanies of England, France, Germany, and America. The collection also includes all the United States reports and the separate reports of individual states as well. Many hundred very fine plates from Austria, produced by a process of nature printing, by the royal press of Vienna, have been added. The practical value of this great botanical library is incalculable.

Fully one-fortieth of the entire collection is devoted to roses, of which many thousands of pictures have been preserved. About one-fiftieth of the collection is given up to orchids, and the devotee of that much-prized flower could spend several months here in absorbing interesting information about it. There are fully 6,000 species of orchids known, which, of course, are divided into their tribes, sub-tribes, genera, and species.

Innumerable chapters of historic interest may be found within the pasteboard covers of this remarkable library. Each tree and plant of note is thoroughly described and illustrated. For instance, ample information may be obtained of the famous Charter Oak, the thirteen trees planted by Alexander Hamilton in the upper part of New York, the original Seckel pear tree near Philadelphia, and all of the conspicuous "big trees" of California and in the great Northwest. Prof. Lyon has taken pains to obtain all that has been printed about trees and plants in which public interest has at any time been aroused. He has secured full and instructive descriptions of the great family of rubber trees, of the Welwitschia, or wonderful stump-tree, of the "knee-joint" swamp cypress, and of hundreds of other specimens of peculiar vegetable growth. This collection, taken in its entirety, possesses many advantages over a herbarium. It has the natural colors of the plants, which the herbarium has not. It can also show many things which the herbarium cannot, whole trees, for example, as well as dissections and microscopic sections, plants under various circumstances and conditions of growth. As a matter of fact, while the pictorial cyclopedia affords a general discussion of the whole vegetable kingdom in every light possible, it is supplemented in Prof. Lyon's library both by a good herbarium and by a good botanical library.

Youngers & Company, Geneva, Neb., will plant twenty-five acres to apple seed this spring.

FIRST-CLASS IN EVERY RESPECT.

JOHN PALMER & SONS, LIMITED, ANNAN, SCOTLAND.—"Enclosed find money order for renewal of subscription of your estimable journal. It is a first-class journal in every respect and we would not be without it."

CATALOGUES RECEIVED.—Vick & Hill, Rochester, N. Y., for florists and dealers; Harlan P. Kelsey, Linville, N. C., native North American ornamental plants; Henry A. Dreer, Philadelphia, seeds and plants; John Gardiner & Co., Philadelphia, for florists and market gardeners; D. M. Ferry & Co., Detroit, Mich., seeds; New York Market Gardeners' Association, New York City, seeds; D. Landreth & Sons, Philadelphia, seeds; L. L. May & Co., St. Paul, Minn., seeds; A. M. Smith, St. Catherines, Ont.; R. & J. Farquhar, Boston; Massachusetts Horticultural Society, schedule of prizes for 1894; Colorado Nursery Co., Loveland, Colorado, Rocky Mountain evergreens, plants and seeds; Cleveland Nursery Co., Rio Vista, Va.; Esmond Yankton Evergreen Nurseries, Yankton, S. D.; J. Blaauw & Co., Boskoop, Holland; J. C. Vaughan, seeds, Chicago and New York: Central Nurseries, Waukee, Ill., general nursery stock; Lovett's Guide to Fruit Culture, J. T. Lovett & Co., Little Silver, N. J.; L. W. Carr & Co., Lake Shore Nurseries, Erie, Pa.; T. S. Hubbard Co., grape vines, small fruits, etc.; E. Moody & Sons, Lockport, N. Y.; Augustine & Co., Normal, Ill.; Jackson & Perkins, Newark, N. Y., specialties; Samuel C. Moon, Morrisville, Pa.; A. S. Bassett & Son, Springdale Nurseries, Gainesville, Tex.

You Can't Afford To Be Without It!

The Active Business Man

Is the One Who Succeeds.

Keeps Thoroughly Posted

On All Trade Topics.

Are You Doing This?

If Not, Why Not?

Here is a Trade Journal

Which Offers You

The Fullest Information

Regarding Your Business.

Advertisers Say It Pays.

Subscribers Praise It.

Goes to Live Nurserymen.

It Is Preserved.

Send In Your Dollar,

And Be In Line.

The National Nurseryman Publishing Co.,

305 Cox Building,

ROCHESTER, N. Y.

COLORADO FRUIT CULTURE.

Frank E. Hartman, writing to the *Field and Farm* says: "Horticulture is the coming industry in Colorado. Fifteen years ago there was hardly an orchard in the state. Now there are 45,000 acres in fruit, one-third of which has come in bearing and which yielded last year $2,250,000 to the fruit growers. The extent of the demand is shown in that hundreds of car-loads of fruit are annually imported from California. This import the fruit growers of Colorado are gradually diminishing. Soil and climate combine to render the mountain valleys of Colorado the home of the apple, the peach, the pear, the apricot, the grape, the plum, the cherry, while all the small fruits, like raspberries and strawberries, grow luxuriantly and yield prolificaly. For the past six years a ten-acre fruit farm at Canon City has paid a net profit of between $400 and $500 an acre each year. Last year a fifteen-acre farm in the Grand Valley near Grand Junction yielded $3,800 in peaches, pears, cherries, plums, apricots, strawberries, raspberries, etc.

Dall De Weese, the well-known, Colorado nurserymen, believes that Colorado is the best apple state in the country. He also believes that no state affords so great advantages in varied altitudes for the successful cultivation of the largest number of fruits.

It is estimated that there are 60,000 acres in orchards in Colorado, three-quarters of which acreage, however, has not yet come into full bearing, and fully one-fourth is not bearing at all, being but recently set. Careful estimates this year place the increased orchard area at 20,000 acres, the most of which will be on the western slope in Garfield, Mesa, Delta and Montrose counties.

ONE OF THE BEST PUBLISHED.

NICHOLS & LORTON, DAVENPORT NURSERIES, DAVENPORT, IA. —"Enclosed find $1 for one of the best papers published."

Spraying Fruit Trees.

Apples $2.00 Per Bushel.



Wheat 50 cts. Per Bushel.

When apples bring $2.00 per bushel and wheat only about 50 cents, when the expense of taking care of an acre of apple orchard is no greater than that of an acre of wheat, while an apple orchard will yield ten bushels of apples to one bushel of wheat, it is about time fruit growers were opening their eyes and taking care of crops which pay the largest profit. What is true of apples may also be said of other varieties of fruits. By properly spraying your fruit trees, vines and vegetable crops, you are sure of a crop, no matter what the weather conditions may be. Send 6 cents to **WILLIAM STAHL, QUINCY, ILL.**, and get his catalogue of spraying outfits and complete treatise on spraying; it will pay you to do so. Mr. Stahl has been interested, himself, in growing fruit largely for many years and fully understands the wants of fruit growers in this direction.

The Attention of Nurserymen, Florists

AND OTHERS IS INVITED TO OUR IMMENSE STOCK OF

Field Grown Hybrid Perpetual Roses.

The list embraces the following standard varieties:

Alfred Colomb.	**Earl of Dufferin.**	Gloire de Margottin.	**Lady Helen Stewart.**	**Paul Neyron.**
Anne de Diesbach.	Francois Levet.	Jean Liabaud.	Magna Charta.	Prince Camille.
Baron de Bonstetten.	**Gen. Jacqueminot.**	John Hopper.	**Marshall P. Wilder.**	Etc., etc.

Also the following climbing roses:

Baltimore Belle. Queen of Prairies. Mrs. Hovey. Triumphant.

And the new Hybrid Rugosa Rose

MADAME GEORGES BRUANT.

The plants are one year old budded low on the Manetti and two years on own roots, all of our own growing (which are superior to the imported), and embrace the best kinds.

Our supply of general nursery stock is also very large and complete. Particular attention is directed to the following:

Baldwin Apples.	**Angouleme Pears,** dwarf.	Lombard Plum.	Golden Queen Raspberry.
Bartlett Pears, standard.	Windsor Cherry.	**Cuthbert Raspberry.**	Gregg Raspberry.

GRAPE VINES, CHOICE PLANTS.

Concord.	Lady.	Moore's Diamond.	Niagara.
Hartford.	Lindley.	Moore's Early.	Salem.

WHITE GRAPE CURRANTS.

Ornamental Trees and Shrubs, both deciduous and Evergreen. The largest collections in America. Newest varieties. Finest Stock. Prices remarkably low. Correspondence solicited. Order early. Catalogue free.

ELLWANGER & BARRY, MT. HOPE NURSERIES, ROCHESTER, NEW YORK.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

· SPRING OF 1894. ·

All Young and Thrifty and First Class In Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
4,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, Strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.
100 lbs. " " " Seed from plants raised of seed obtained from the originator of this variety.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, Chester Co., Pa.

Geneva Nurseries.

YOUNGERS & CO., Props.

. . GENEVA, NEB . .

WE HAVE A LARGE SURPLUS OF

· SHADE TREES. ·

OF THE FOLLOWING SORTS:

SILVER MAPLE,
CATALPA SPECIOSA,
WHITE ASH,
WHITE ELM,
CAROLINE POPLAR,
AMERICAN BIRCH,
SYCAMORE,

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

GEYER BROS., ROCHESTER, N.Y.

⊹ SURPLUS ⊹

Standard Pears, Dwarf Pears, Cherries, Norway Spruce and Grape Vines.

ROSES.—Gen. Jacqueminot, Madam Plantier, Anne De Diesbach, Alfred Colomb, Paul Neyron, Prince Cam. De Rohan, Coquette Des Blanches, Pius IX, Queen of the Prairie, Gem of the Prairie, Luxemburg, Crested Moss, Salet Moss, Capt. John Ingram, White Moss.

OUR STOCK HAS THE BEST OF CULTIVATION, AND IS HEALTHY AND THRIFTY.



Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,

ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . . .

AGENT FOR UNITED STATES AND CANADA. ❋ ❋ ❋

ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK.

No Trees are better, nor did we ever offer a larger General Stock—one item being several million Whole Root apple,. Buyers who have been disappointed in Western trees because of poor roots (1 inch pieces are grafted by some), lack of care in digging, &c., will like ours; we use No. 1 stocks, shortened to 8 inches, the finished grafts 12 inches long. Free packing. Free extra count—10 per cent. Free Freight. Stark Bro's, Louisiana, Mo.

e.f.i.

Gilbert Costich, Rochester, N. Y.

SURPLUS FOR SPRING, 1894.

Apple, Cherry, Dwarf Pear and Plum,
Evergreens, Ornamental Trees, Etc.



Electrotypes and Cuts

OF FRUITS, TREES,
PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

John Waterer & Sons, Lt'd,

NURSERYMEN,

BAGSHOT, ENGLAND.

RHODODENDRONS AND OTHER HARDY EVERGREENS.

Correspondence solicited.

NIAGARA NURSERIES
ESTABLISHED 1839
PEAR TREES
AND ALL OTHER NURSERY PRODUCTS.
E. MOODY & SONS
LOCKPORT, N.Y.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . .

HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WE are still in the market with our **Dry Baled Moss,** and at prices to correspond with the hard times. We are in need of Apples, Plums and Cherries in exchange. Also have a good stock of Dwarf Juneberry and High Bush Cranberry in cellar for early shipment.

Z. K. JEWETT & CO., Sparta, Wis.

---

600 ACRES. ESTABLISHED 1852. 13 GREENHOUSES.

PHOENIX NURSERY COMPANY.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

Nurserymen and Florists, Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. **BLOOMINGTON, ILL.**

Asparagus Roots.

FIVE BEST KINDS.

Elmira and Columbia White. **Write for Wants to**

I. & J. L. LEONARD, IONA. N. J.

STRAWBERRIES. 999,999 Plants.

60 VARIETIES, OLD AND NEW.

Kansas, Older and Palmer. Raspberry Tips, and all other kinds of Small Fruit Plants. Lowest prices. Write for Catalogue.

F. W. DIXON, Successor to DIXON & SON, **NETAWAKA, KANS.**

Raffia! Raffia! Raffia!

BEFORE BUYING GET SPECIAL QUOTATIONS FROM THE UNDER NAMED FIRM, THE FIRST INTRODUCERS OF AND THE LARGEST IMPORTERS AND MERCHANTS OF THIS EXCELLENT TYING MATERIAL.

JAMES T. ANDERSON,

135 and 137 Commercial Street, London, England.



WE ARE HEADQUARTERS FOR

STEPHEN HOYT'S SONS'

Celebrated

Green Mountain Grape Vines.

The earliest and most delicious Early Grape yet introduced.

Also a fine line of

CHOICE NURSERY STOCK.

We supply dealers and the wholesale trade. Send us your want list. Address

STEPHEN HOYT'S SONS, : : : NEW CANAAN, CT.

ASPARAGUS ROOTS LARGE SUPPLY

Palmetto, Barr's Philadelphia Mammoth, Conover's Colossal.

Milford Nurseries, Address, ALEX PULLEN, MILFORD, DEL.

We want your Nursery Printing.

The season for Fall Delivery will soon open and if you are a progressive Nurseryman you will certainly need PRINTING—and plenty of it. Perhaps you are not aware that we have one of the finest equipped plants in this section for the turning out of a high grade of **Nursery Printing,** and that our prices are very low.

No matter what you may want in the PRINTING or BINDING line, we are headquarters, and are always glad to submit samples and estimates of anything which you may require.

Our new catalogue, now in press, is a "daisy" and if you use a "stock" catalogue, this is the one you want—as it contains everything new and up to date. Send us in your next order.

The Gelhaar, Fleming & Fuller Printing Company, Incorporated,

COOK OPERA HOUSE BLDG.,

ROCHESTER, N. Y.

ELEVATOR. TELEPHONE 989.

THE NURSERYMAN IS FROM OUR PRESS

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

2/3

THE NATIONAL NURSERYMAN

June, 1894.

Painesville Nurseries.

FRUIT AND ORNAMENTAL TREES—SMALL FRUITS AND GRAPE VINES—SHRUBS AND ROSES—PLANTS AND BULBS.

Largest assortment of new and old varieties; unequaled facilities for prompt and accurate filling of all orders; immense storage cellars and packing houses.

WEEPING DECIDUOUS TREES.

Splendid stock; Tea's Weeping Mulberry, Mountain Ash, Camperdown Elm, Kilmarnock, New American and Wisconsin Weeping Willows, Cornus Pendula, Young's Birch, Whiteleaf Linden, etc.

Full line Upright Deciduous and Evergreen Ornamental Trees, Poplars, Maples, Tulips, Flowering Thorns, Magnolias, Elms, Catalpas, Purple-leaved Beech, Norway Spruce, Pyramidal Arbor Vitæ, etc.



CAMPERDOWN ELM.



Large stock Blackberries, extra fine plants from root cuttings, including a large lot of Ancient Briton, the best hardy market variety. All the leading kinds of Currants, Gooseberries, Raspberries, Strawberries, etc., in large supply.

Fine stock Mulberries and Nut trees, American Chestnuts from 1 year seedlings to 6 to 8 feet, at low rates.

Handsome blocks of Standard and Dwarf Pears, Plums, Cherries and Peaches.

ROSES.

12 acres of strong field-grown plants. No better stock in the U. S.

Bulbs for Fall trade direct from the best Holland and French growers. Highest quality at low rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. 1000 ACRES. 28 GREENHOUSES.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

"The most complete nurseries on the American Continent."—*American Rural Home.*

MT. HOPE NURSERIES,

Established 1840.

ROCHESTER, N. Y.

Fruit Trees,
Small Fruits,
Ornamental Trees and Shrubs,
Evergreens,
Roses,
Hardy Plants.

The Most Complete Collections in America.

Correspondence Solicited. Catalogues Free.

ELLWANGER & BARRY, PROPRIETORS.

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

KAWANA, MITCHELL CO., N. C.
(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

In addition to the fine Cut-leaf Weeping Birch offered last month, I have a good assortment of Plums, first-class medium and half inch; also 5,000 dwarf Duchess Pear, 2 and 3 years; a few hundred Seckel and Clapp's Favorite standard Pear, 1 inch and over, 7 to 9 feet; standard Pear ¾ and ⅝; few thousand No. 2 and No. 3 Peach, plenty of Elberta in the lot; few Mountain and Oak-leaved Ash, and about 2,000 roses.

This stock was raised to sell, and is going to be sold. Prices given with pleasure.

JAY WOOD,
KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

Newark, Wayne Co., New York.

GROWERS OF CHOICE SPECIALTIES for Nurserymen and Dealers.

ROSES, Hybrid Perpetual.—Mosses and Climbers; strong two year old plants on own roots; much superior to imported stock as they are strong, acclimated and true to name. Budded plants of those kinds which can not be grown on own roots.

CLEMATIS.—The largest stock in this country; Jackmanni, Henryii, Ramona, Paniculata, Duchess of Edinburg, Velutine Purpurea, Madame Grange, Lanugiosa Candida, Lord Neville, Sir Garnet Wolseley, etc. Over twenty-five varieties; extra strong, well-rooted plants.

HONEYSUCKLES.—An extra large and fine stock of Hall's Japan; also Monthly Fragrant, Scarlet Trumpet, Red Tartarian, etc.

HYDRANGEAS.—Paniculata Grandiflora, both tree-form (3½ to 4 ft. high) and bush-form. Otaksa, fine strong plants.

JAPAN SNOWBALLS.—Extra large, strong plants.

LILACS.—A large stock; strong plants; good assortment.

CHINESE PURPLE WISTARIAS. AMPELOPSIS VEITCHII.

PAEONIAS.—Large undivided tubers; the finest varieties obtainable in France or Italy.

EVERGREENS.—Austrian Pine, Norway Spruce, American and Siberian Arbor Vitae, Yew Compacta, Irish Juniper, etc. All liberally graded, healthy and of good color.

Also a full line of Altheas, Berberries, Deutzeas, Purple Fringe, Silver Bell (or **Halesia Tetraptera**), Syringas, Thorns (Paul's New Red and White), Weigelias, etc.

ORNAMENTAL TREES.—Cut-leaf Birch, Kilmarnock Willows, Tea's Weeping Mulberry, Double Red Flowering Horse-Chestnut, Catalpas, Norway Maples, Oak-Leaf Mountain Ash, American Elms, etc.

CURRANTS.—Both tree and bush-form; a full assortment and large stock of extra strong plants.

GOOSEBERRIES.—Extra fine three year old Industry; also Downing, Houghton, Smith's Improved, etc.

GRAPE VINES.—A good assortment.

FRUIT TREES.—A large stock; extra fine blocks of Apples, Plums, Quinces, Standard and Dwarf Pears.

Write for our new trade-list just out. Special prices on good sized lots.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing.*

Send for Price-list and Circulars.

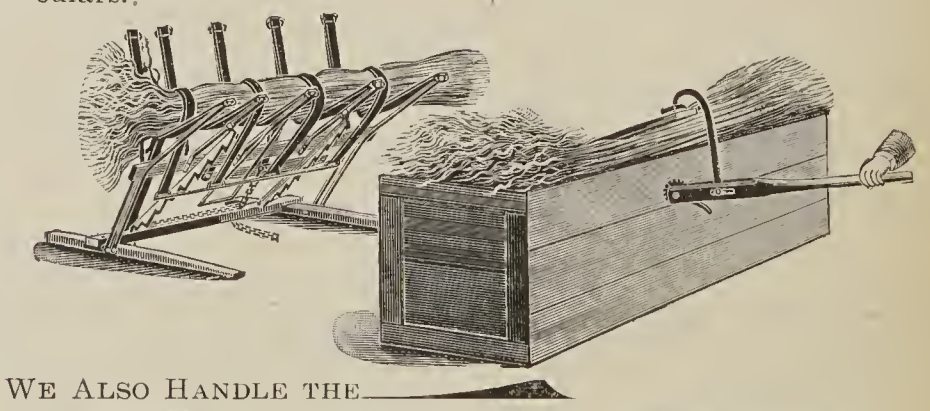
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes

You will save time and money to buy this clamp and *throw away all other styles* of clamp.

It is *simple* to use as a *cant hook.* Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Balers, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

When writing to advertisers mention The National Nurseryman.

THE BEST ROSES,

Azaleas, Rhododendrons, Clematis, Etc., are supplied by the

BOSKOOP HOLLAND NURSERY ASSOCIATION.

For catalogues and prices address, **C. H. Joosten,**

3 Coenties Slip, New York.

C. F. McNAIR & CO.,

DANSVILLE, N. Y.

A large stock of young Apple, Standard and Dwarf Pear, Plum, Cherry, Peach, etc., for Fall '94 and Spring '95.

BUDS FURNISHED IN LARGE ASSORTMENTS AT LOW RATES.

Write for Prices, &c.

Correspondence Solicited.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Stake Labels

FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	**inch;**	**1 1-2**	**x**	**5-16**	**inch.**
18	**"**	**1 1-2**	**x**	**1-2**	**"**
21	**"**	**1 3-4**	**x**	**3-4**	**"**
24	**"**	**2**	**x**	**3-4**	**"**
27	**"**	**2 1-2**	**x**	**7-8**	**"**
30	**"**	**3**	**x**	**7-8**	**"**

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. **Samples Free.**

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

When writing to advertisers mention The National Nurseryman.

WAKE UP!

If you want to secure the best prices it is time you were placing your order. **Prices will advance.** We are prepared to offer to the trade in **car load** lots an extra fine stock of **Apple, Cherry, Peach, Plum and Pear, (Kelffer especially.)** Also a general assortment of Evergreens, Ornamentals, Small Fruits, etc., etc.

Knight's Improved Currant, the most productive known.

SEEDLINGS, Apple, Mariana Plum Stock, Imported Pear, Mahaleb and Myrobolan Stock.

SPADES.

The best Spade for the money ever offered; try them and be convinced. You cannot afford to be without them. **20 dozen sold last year** Ask W. F. Heikes, Huntsville, Ala.; Geo. Peters & Co., Troy, O.; L. G. Bragg, Kalamazoo, Mich; Hoover & Gaines, Dayton, O.; and others what they think of them. (See circular.)

Correspondence and Personal Inspection Courted.

ALBERTSON & HOBBS,

Bridgeport, Marion Co., - - - - Indiana.

Fine Wholesale stock of the two new Hedge plants,

LIGUSTRUM MEDIA, LIGUSTRUM IBOTII,

Splendid stock of RUSSIAN GOLDEN BARKED WILLOW, RED CORNEL, FORSYTHIA SUSPENSA, HYDRANGEA PANICULATA (Type.) **WHITE SPRUCE, NORWAY SPRUCE. CLEMATIS PANICULATA,** Splendid stock in all grades from extra heavy to mailing sizes.

Immense stock of Hardy Perennials, including best varieties of IRIS, PHLOX, PYRETHRUMS, PÆONIES, HOLYHOCKS, LARKSPURS, ETC., ETC. over a thousand distinct species and varieties.

THE READING NURSERY, (Established in 1854.)

JACOB W. MANNING, Proprietor, **READING, MASS.**

Wholesale Lists ready; write if you have not received one.

1838. **56 Years. 300 Acres.** **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifollate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES, WILLIAM PARRY, PARRY, N. J.

When writing to advertisers mention The National Nurseryman.

HERE WE ARE AGAIN!

In the early summer time, solicitors of your patronage.

To Prospective Purchasers.

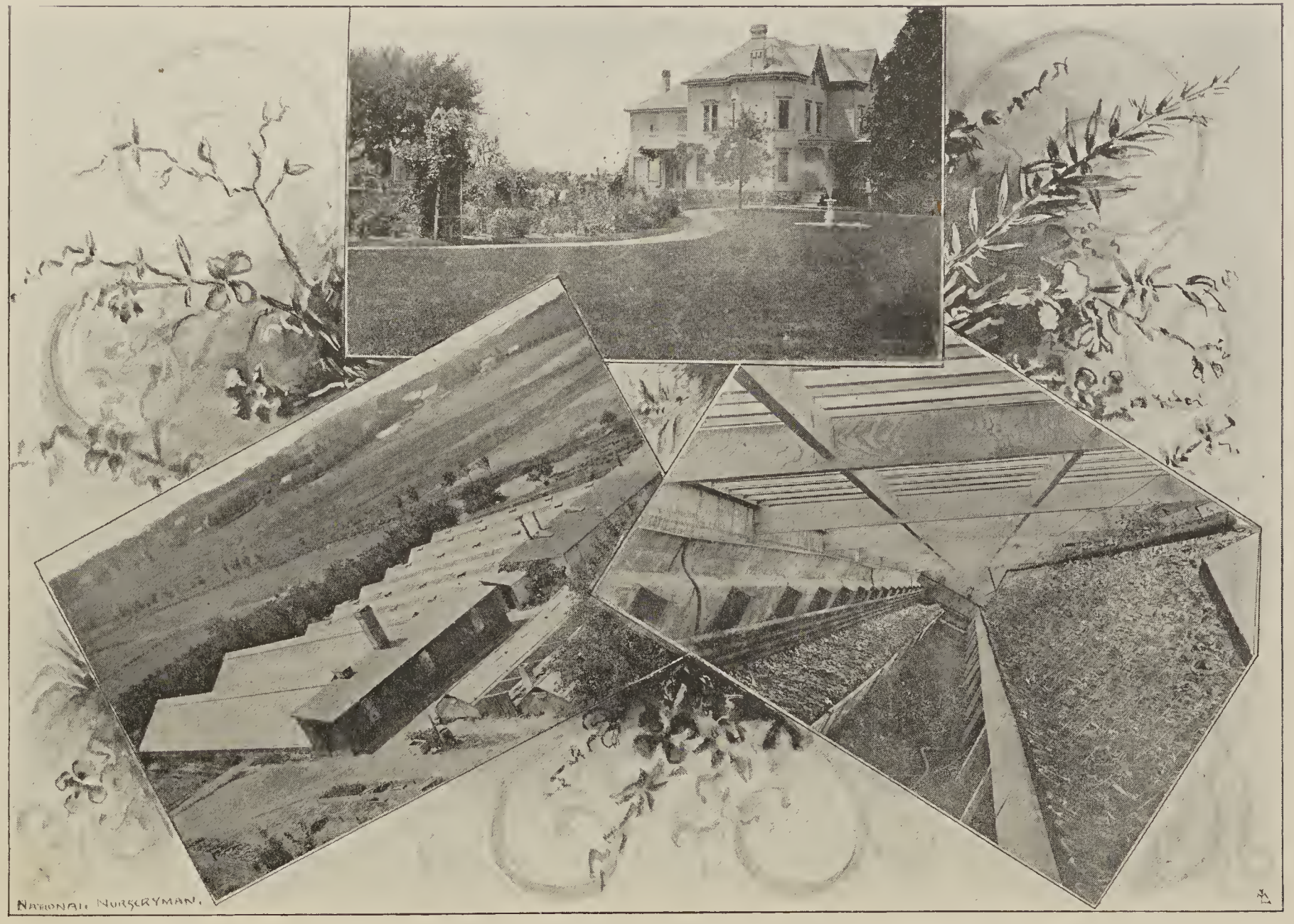
Defer your orders until you see our unparalleled offers in the next issue of this journal. . . . . .

J. FRANK NORRIS,

Brighton Central Nurseries.

BRIGHTON, N. Y.

ESTABLISHED FIFTY-TWO YEARS.



VIEWS ON JACKSON & PERKINS' GROUNDS,
NEWARK, WAYNE CO., N. Y.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

VOL. II. ROCHESTER, N. Y., JUNE, 1894. NO. 5.

SOME RESULTS OF SUBSTITUTION.

Jacob Moore, of Attica, formerly of Brighton, N. Y., the well-known originator of the Brighton grape, some time ago gave his views on the methods which have been adopted to secure the dissemination of the "products of nature." Many are familiar with those views. For the benefit of those who are not, the opinion of Mr. Moore is reproduced herewith :

"It has occurred to me to recount some of the notorious swindles in horticulture caused by the lack of exclusive rights to new productions. After the Isabella grape had been generally disseminated, it was named Payne's Early and sold as a new variety earlier than Isabella. Being 'a product of nature,' there being no law against so doing, why should not the grower put money in his pocket by such means ? Eureka was another name given to it at Attica, N. Y That the Isabella has been frequently introduced under new names is shown by the fact that horticultural authorities mention as many as sixteen synonyms. Catawba has also been renamed many times for the purpose of introducing it as a new variety. After the advent of the Concord, the Maine grape and Chapman's Seedling were heralded in the state of Maine as seedlings earlier and better. Thousands of vines were sold at high prices by this means, but in the course of a few years they were generally recognized as old Concord. Being 'a product of nature' and the dissemination thereof free, there being no law to prevent renaming it, why should not the propagators put money in their pockets in that way ? When the Worden grape was introduced certain well-known horticulturists proclaimed it to be Concord. Doubtless previous deceptions had put them on the alert for frauds. They were mistaken this time, however, as the Worden, although of the same color and a seedling of the Concord, proved to be a distinct variety, earlier and larger. The announcement, however, that it was identical had the effect to lessen the demand for the vines and thus injured the originator, who is reported to have received no compensation for it. When it was proved to be distinct and valuable much of the demand for it was supplied, as at first by substituting Concord, labeled Worden. Being 'a product of nature,' and the dissemination thereof free, the nurserymen had a right to publish the name and description in their catalogues, whether they had a stock of the plants or not. As a consequence, agents and dealers took orders for them. The nurserymen had plenty of the Concord, and as the two varieties are much alike, 'what harm to substitute that labeled Worden ?' This was accordingly done by unscrupulous nurserymen and dealers to an extent that only the judgment day will reveal. The same game was played with the Brighton on an equally extensive scale. This grape was produced by an enthusiast named Moore, while a resident of Brighton, N. Y. It was the result of two crosses, the first being from seed of the Diana fertilized with Black Hamburgh, in the year 1860. The best result of the cross was named Diana Hamburgh, which was a magnificent failure. Magnificent because so large, handsome, and good ; a failure, because the foliage was liable to mildew and the vine was not sufficiently hardy. The originator was disappointed, but persevered. He recrossed the Diana Hamburgh with the Concord, and the Brighton grape was the result. He sold the variety to the introducer for less than it cost him, as he had not the means to introduce it himself. The introducer, although fully aware that many parties were swindling the public by means of false labels, was powerless to prevent them, because the variety was 'merely a product of nature, the sale of which must be free and unrestricted.'

"When the Cherry currant first appeared its sale throughout the United States was a swindle of such magnitude that it may properly be termed *national.* It was first imported from France. The nurserymen with few exceptions, published the name and description in their catalogues in hot haste when there was but a small stock of plants in the country. Immediately the demand for the plants was far greater than the supply and the usual artifice of false labels was resorted to by many parties. What tree agent has not heard the story of the Cherry currant swindle enough times to make him feel sick at his stomach ? It is about as follows : 'A tree agent came around here some years ago with a picture book. The picture of the Cherry currant he showed me was so large and handsome, I thought the sort must be worth having, and ordered some plants. I took good care of them and they grew well, but the fruit proved to be nothing but the common little red currant, which I already had. He gave my neighbors the same treatment. I believe I won't buy anything in your line today.'

"The introduction of the Clapp's Favorite pear afforded another opportunity to fleece the public, which was not lost by unscrupulous parties in the trade Many

nurserymen published it in their catalogues when they had no stock, and the usual consequences followed. The new variety was reported to be a cross between the Bartlett and Flemish Beauty. Of course years elapsed before many purchasers found out they had not the 'product of nature' they bought.

"The Golden Queen strawberry was another swindle. It was advertised and sold extensively under that name as a new sort, but was soon identified as the ancient variety, Trollope's Victoria.

"Several years ago, one of the introducers of the grape named Empire State told me 'thousands and thousand of vines had been sold by other parties for that variety which were not genuine.' This 'product of nature' came from seed of Hartford Prolific pollenized by Clinton, by J. H. Ricketts of Newburgh, N. Y., who is reported to have received four thousand dollars cash for the entire stock of the variety. The late H. E. Hooker, nurseryman at Rochester, N. Y., who had ample opportunity to estimate the cost of the originator's experiments in obtaining the variety, told me he thought he had not profited by its sale.

"A favorite trick of unscrupulous parties in the trade is to substitute the Queen of Prairie rose for some new, rare variety under the name of the latter. The former makes strong plants which give satisfaction when delivered. The variety being a 'product of nature, it is not desirable that anyone should have a monopoly in its sale.'

"The Early Rose potato is reported to have been disseminated without the consent of the producer, and as a consequence he did not obtain compensation for it. Being a mere 'product of nature,' there was no law by which he could obtain redress.

"The number of synonyms by which most of our popular fruits are known in different sections of the country, as recorded in Downing's work on fruits, shows that the right of a free-born American horticulturist to rename an old, well-known variety and perchance swindle the people by such means, has not been neglected. Many seedsmen have made a practice of renaming vegetable seeds. 'Being a prod—,' but methinks I hear some reader say, cease to iterate that phrase, I pray. I suspect it would be more correct to say, the improved new variety in most instances is the result of the skill and labor of man acting jointly with nature.

"The idea entertained by many persons that the American people have always obtained such productions *free*, is like that of the tramp who walks many miles a day under the impression he is not working. A large part of the population have paid amounts which aggregate millions for plants of celebrated new varieties without obtaining them. Again, they have paid millions for worthless novelties which perchance many did obtain.

"How can these evils be remedied? By a law making the trial of all new varieties at the experiment stations compulsory before allowing them to be introduced, in order to determine if they are really new and have merit. Further, the law should guarantee to the originator that in case plants or cuttings of the variety are stolen from him or the experiment station and disseminated in that way, the stock shall be confiscated wherever found. The principal inducement for stealing new varieties, so frequently practiced, would then no longer exist. In addition, the originator should be given the exclusive right to disseminate his production under the name. This would give him the opportunity to remunerate himself, which is now lacking, and he in turn would protect the people in its purchase in order to protect himself in its sale."

WHERE TREES ARE WANTED.

Here is the first week in April, says *Field and Farm*, Colorado, yet apples of good quality, firm, crisp and juicy as when first gathered from the trees, and as nearly perfect as this fruit can be, are still in the Denver market from various parts of the state. They sell readily at from four to six cents a pound. Such prices are something unheard of in the East or in any other apple-growing region. The fruit that brings such high figures is raised by irrigation in the mountain valleys and plateaus of this state, which appear to be particularly adapted to the production of apples of the very highest quality. This week Jerry Coulehan, an all-around farmer near Berkeley lake, on the outskirts of Denver, brought to this office a sample half-bushel of Ben Davis apples grown on his place last season. These apples were as firm and sound as could be expected and are in condition to keep several months, possibly a year.

STATE LAW REGARDING SHADE TREES.

Frederick W. Kelsey, of New York City, was chairman of the committee which framed the bill which has now become a general public law of New Jersey, providing for the planting and care of shade trees on the highways of the municipalities of that state. The bill provides, "That in all the municipalities of this state there may be appointed, in the manner hereinafter provided, a committee of three freeholders, who shall serve without compensation, and who shall have the exclusive and absolute control and power to plant, set out, maintain, protect and care for shade trees in any of the public highways of their respective municipalities." The cost of planting shall be borne by the real estate in front of which the trees are planted, and the cost of caring for the trees by a general tax. This is the only general state law regarding shade trees in this country. A few cities regulate the care and planting of street trees by municipal ordinance.

NIGHT PROWLING PEACH PESTS.

Mr. Glasser, a fruit grower of Forest Lawn, on the shore of Lake Ontario, near Rochester, was considerably exercised in mind over the discovery of serious damage to his peach trees and his inability to find the pest. Finally he found the trees covered with beautiful pinkish-yellow worms which worked only at night and disappeared in the day time. He immediately sent for Professor Mark V. Slingerland, of the Cornell Experiment Station, at Ithaca, N. Y. Meanwhile the story of his discovery was detailed in the columns of a Rochester daily.

Professor Slingerland describes the pest in the following communication :

Editor of THE NATIONAL NURSERYMAN :

It was with considerable interest and much amusement that I read some of the accounts which appeared in a Rochester daily of my recent trip into Monroe county to investigate this nocturnal disturber of the quiet slumbers of the peach growers in that section. How we "bug-hunters" usually suffer at the hands of the daily reporters with their hasty, vivid imaginations ! As only facts are wanted here I will not take the time to get even with them.

The first that was heard of this pest here at the Experiment Station was about June 1, 1893. Complaints came from two sources at nearly the same time. One from Rose, Wayne Co., and the other from Forest Lawn, near Rochester. The correspondent at the latter place (who, by the way, is a lady, and the ladies usually give us the best and most accurate detailed accounts of insect pests that we get in correspondence) sent specimens stating that she believed they were cut-worms. This first invoice of worms failed to reach us, but a second soon followed, and a glance sufficed to show us that the culprits were climbing cut-worms. Everyone, almost, is familiar with cut-worms as they usually occur in gardens about cabbages, etc., and the corn field. And for many years it has been known that some species (for there are several hundred kinds or species of them) would climb trees. The climbing kinds do not differ materially from the ordinary somber-colored worms an inch or more in length, which cut off plants at the surface of the ground. The peach climbers were most of them, however, of a lighter, pinkish-yellow color. When the worms were received it was so late that they had done nearly all the damage to the trees that they would that season, and we carried on no experiments last year against them ; they were simply turned loose in cages here at the insectary and allowed to transform. Some may not know that all cut worms when they become full grown, which usually occurs in June or July, go into the ground, and there in a little earthern cell which they make they change to a brown seemingly lifeless object with its wings, legs, and antennae pasted down to its sides. In about two weeks there comes from this quiet brown object a perfect insect with broad scaly wings, usually of some somber gray or brown color, in other words a common moth or miller, such as fly into the houses attracted by the light at nights. When their wings are expanded they measure about one and a half inches across ; they are familiar objects to everyone. These moths soon begin laying eggs about in the grass, weeds, bushes, etc. From these tiny eggs, not so large as a pin's head (one moth will lay two or three hundred), there soon hatch the little worms which are destined to destroy the buds on the peach trees the next spring. During the fall the little worms feed probably on the roots of the grass, weeds, etc., becoming about half grown when winter sets in. They then go into hibernation in the soil and eat nothing until spring opens. Is it any wonder they are hungry then and on hand when the buds begin to swell ? It is a peculiarity in the habits of all cut-worms that they feed only at night, retiring into the ground during the day. Thus the worms that appear in the buds in the spring were born the preceding year, and when they get full grown in the summer they undergo the same transformation as did their fathers, mothers, etc., before them. From this we see that there is only one brood of the worms a year, although the life time of each worm extends into two calendar years.

When the adult insects, the moths, began to emerge in our breeding cages in July last year we soon found that we had to deal with two different species, first cousins however, and bearing names which would discourage one to pronounce, so they will not be introduced here.

As mentioned above, we tried no remedial measure against these mysterious pests last year. But this spring we determined to be on hand when the worms appeared. I very much desired to visit the scene of their depredations, and on April 26, when I received an urgent request to inspect D. K. Bell's beautiful pear orchard in West Brighton, I determined to visit Forest Lawn, where these pests have killed hundreds of young, recently-set peach trees and grape vines. What would our grandfathers have thought of a fruit grower who was willing to go to considerable expense to have a "bug doctor" come and inspect his orchards and prescribe with what and when he shall spray them ?

Friday night at 8.15 P. M. I reached Forest Lawn and soon found Mr. Glasser, who at once took me into his peach orchard where the worms were then at work ; for everyone of his 800 trees had a wide funnel-shaped band of cotton around it, and he said that not more than one per cent. of the worms ever got above the cotton. So that the worms were then wandering up and down the trunk of the tree below the batting. But there were hundreds of the worms ; every tree had its quota. Sometimes fifty worms have been found on a single young tree. Arrangements were made to have as many worms collected from the trees that night as could be found, for me to take home and experiment upon. Over two hundred were secured before midnight, put in an ordinary wooden box, without food,

and borne the next day far from the scene of their early "wormhood"; but they were not at a loss what to do, nor bashful about doing it, in their new quarters in cages here at the insectary and on trees outside, for the hungry chaps were at work on the buds at the first opportunity.

Friday was mostly spent in visiting neighboring peach growers and getting their experience with the pests. From one I learned how the culprits were first discovered. Many growers had noticed that the buds did not start on many trees and the trees soon died, as they supposed, from having been frost bitten, or from other unknown causes. One extensive grower, however, happened to be passing through his orchard at night and soon heard a nipping or biting sound proceeding from the trees. Investigation showed that the noise was caused by the coming together of hundreds of minute boring jaws on his opening peach buds. The chewing of a few worms or of many during the noisy daytime would not have been heard, but in the dead stillness of the night the combined noise of hundreds of the worms could be distinctly heard. This grower had effectually kept the worms in check by digging them out during the day from the soil about the base of the trees. The worms lie just beneath the surface of the soil and near the tree, so it is a short job to dig them. This followed up for two or three days soon practically exterminated them in this orchard. Another man had put tar on his trees, with fatal results to many of the smaller trees. One man was found who had removed the cotton that he had put around the trees a few days before. Upon being asked why, he showed me several trees where the worms had eaten off the bark in quite large patches beneath the cotton. They would have soon girdled some of the smaller trees. Some growers had used flour and Paris Green mixed up dry and a little spread on the surface of the soil at the base of tree; good results were reported with this mixture. In a preliminary experiment here at the insectary, it was found that the worms ate readily of a mash made of bran 25 lbs., arsenic or Paris Green 5 lbs., sugar 5 lbs. or molasses 1 pint, and water sufficient to make a mash. A tablespoonful or two of the mash was placed about the base of a tree and twenty out of twenty-five worms were found dead after the second night. Chemical analysis of the contents of their stomach showed decided traces of arsenic, thus proving beyond a doubt that the poisoned mash was the cause of death. These poisoned baits need to be further experimented with in the field. There is no doubt that the cotton batting band, properly applied, is the most practicable, cheapest and effectual thing that has been used to keep the worms from the buds. But the worms must then be killed in some way or they may girdle the trees beneath the batting or be forced to attack other crops; for they do not stop at peach buds, but attack and are very destructive to young grape vines, bushes, and, in fact, work among all the garden vegetables the same as do the ordinary garden cut-worms. Thus with the batting to keep the worms from the buds, must be combined either hand-picking or crushing at night as they are climbing the trunk below the batting, or perhaps it will be practicable to poison them with the mash or flour. Our experiments are yet incomplete, so I can only suggest these things.

From the cut-worms examined this year we learn that there is more than one species or kind at work. Four distinct kinds have thus far been distinguished, one kind, however, in much greater numbers than the other three. The worms do their greatest damage on newly set and one or two-year-old trees, and grape vines. They also climb and attack the larger trees, but the loss of a few buds on these is not noticed. Cut-worms thrive best in loose sandy soils, such as are found about Forest Lawn and other places along the lake shore. It has been noticed that where a heavier loam crops out in these regions, the cut-worms are not near so numerous and do but little damage to peach orchards set in such soils.

M. V. SLINGERLAND.

Cornell Experiment Station, Ithaca, N. Y.

PEACHES AND GRAPES OF 1894.

Horace W. Day, of Sgobel & Day, New York city, fruit commission merchants, says the New Jersey peach crop, barring June drop, will amount to about 600,000 baskets; the crop of Delaware and Maryland combined about 200,000 baskets. This gives a total of 800,000 baskets of peaches which is considerably less than the crop of New Jersey last year. This entire output, if realized, will no more than supply their local home markets, and there will be no peaches for shipment, very few for canning, and none for drying.

The grape crop of New York and Ohio promises to be the largest ever grown in those states, and indeed grapes promise to be plentiful throughout the country. This fruit then will be a good substitute for other fruits, the scarcity of which in many sections is certain.

B. Presley & Co., St. Paul, fruit dealers, recently made a careful canvass of the condition of the fruit crop in the Eastern states. They say: "The damage has certainly been very great to fruit. In some localities the destruction is almost complete, while in others it runs from 75 per cent. down to 25 per cent.—the latter almost any orchard can stand with benefit. We estimate the total average loss at about 60 per cent., except apples and grapes. The heaviest loss is on peaches, which is pretty general, followed by pears, cherries, plums and other small fruits. Apples and grapes are not hurt yet, except in a few unimportant localities."

It is probable that the greatest damage was confined to the southern states.

C. H. PERKINS.

The accompanying portrait is that of C. H. Perkins, of the firm of Jackson & Perkins, Newark, N. Y. Mr. Perkins has for many years been the only active partner of this firm, Mr. Jackson being incapacitated by extreme age, and it is to his energy and business ability that their success is due. Mr. Perkins is also a member of the firms of Peirson & Perkins, bankers, and C. H. Perkins & Co., wholesale produce and commission merchants, whose business comprises large transactions in California dried fruits and raisins and extensive sales of peppermint oil and evaporated fruits throughout all the countries of Europe. Mr. Perkins has all his life been an ardent lover of nature and much interested in all sorts of ornamental and decorative plants, and it was this love of the beautiful which led him into the growing of such stock as a business. He found it a pleasant occupation and relaxation. He has also for thirty years or more been closely connected with the fruit growing interests of the country, both through his ownership of extensive orchards in Kansas and Michigan and through his large business in green and dried fruits. The latter having brought him into constant contact with fruit growers, perhaps had something to do with his becoming interested in the nursery business. The interesting article on "Cold Storage for Neighborhoods," which Mr. Perkins read before the last meeting of the Western New York Horticultural Society showed his wide and diversified experience with all that has to do with fruit culture.



C. H. PERKINS.

Although he never practiced it, except as a pastime, Mr. Perkins is a landscape gardener of no mean ability, as is shown by the beautiful and tasteful manner in which the grounds about his residence are laid out. The grounds of the State Custodial Asylum for Feeble-minded Women, at Newark, were laid out under the direction of Mr. Perkins. They are some forty acres in extent and very tasteful and beautiful. No public buildings in that vicinity are more beautifully situated.

A. H. GRIESA, LAWRENCE, KAN.—"The paper deserves the support of the trade."

ISAAC C. ROGERS, MOORESTOWN, N. J.—"We wish you success on your very popular and useful paper."

A GARDENER'S PROTEST.

"A quiet member of the Berkshire county gardeners and florists club" in a communication to *American Gardening* says: "I think, in the interest of the gardening world, that it is about time to protest against the custom of some nurserymen of employing any and every kind of men as agents to represent them in soliciting orders. Berkshire county is apparently a haven for these men. They are here thick and torment and worry people who have little time to throw away. These men have the audacity to suggest what we ought to plant, and how to plant and treat them; in fact they know how to do and how to perform everything connected with trees on a private gentleman's place, and I could name instances where these inexperienced agents obtain better consideration at the hands of the employer than the gardener who may have devoted all his years to the study and care of such trees. I do not protest against regularly trained men from calling and soliciting trade, but I do emphatically protest against the ignorant, inexperienced agent. I do not care how beautiful his tongue may be. I have had these agents come to me and say, 'If you can do anything to help me get a bill here, I'll divide.' As a private gentleman's gardener, I will say that a very large percentage of gardeners are men who, although they buy what their rich employers have to pay for, are conscientious, and will, irrespective of proffered bribes, always be found to do their trading where the best value is given for the money. Every gardener knows all the best firms, and if they want to buy they know where to send; agents should understand this. I will say in conclusion that if nurserymen must have agents, why do they not train men on their grounds? Most of them employ a large force; let them learn the business and graduate one by one and send them out and not advertise for men, with '*no experience necessary*' qualification, for I maintain that experience is necessary."

The Nurseryman's Protective Association of which George S. Josselyn, of Fredonia, is president, will meet at Niagara Falls on June 8th.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., JUNE, 1894.

PROTECT THE ORIGINATOR.

In another column is published a plain statement from one of the best known grape originators in the country, Jacob Moore, the originator of the Brighton grape. Mr. Moore has studied the methods of some who have been engaged in the nursery business and it is not likely that any one will gainsay the truth of his statements. He has suffered at the hands of the dealer and the grower who substitutes. Fortunately for the originator of fruits and for purchasers of nursery stock generally, the protest upon the part of the great body of conscientious nurserymen, as well as the planters, against the practice of substitution, has had a beneficial effect. It is probable that this evil is becoming less each year, or at least that it is not practiced so generally nor so boldly. All over the country are reputable nursery growers and dealers who are guarding their reputation carefully in this respect and to whom a discussion of substitution is of interest only in that it may suggest renewed activity against those who persist in its practice.

Substitution has much to do with the failure of new varieties to prove all that is claimed for them. The purchaser of nursery stock asks lately for "the old varieties." He has tired of experimenting with sorts alleged to be new, but proved to be old. This leads to the question: Are new varieties worth their cost, which was so ably discussed in a paper by Professor L. H. Bailey, recently published in this journal. If it is admitted that novelties are worth their cost, as Professor Bailey has shown, then the nurserymen's interest is in encouraging the production of such new varieties at least which are needed for gaps, for new regions, various soils, new markets and new household purposes. The nurseryman, if only from a selfish motive, should work hand in hand with the originator of fruits or ornamental stock. He cannot afford to antagonize the interests of the originator in any degree.

It is doubtful that laws will be passed soon for the protection of the originator, as Mr. Moore has suggested, though if other methods fail, that will be the result. A practical way is a determination upon the part of nurserymen to advance the interests of the originator wherever possible, even to the exposure of fraudulent methods in so thorough a manner as to make success with such methods impossible. A healthy sentiment backed by the co-operation of all who are determined that right shall prevail, is a law unto itself. The subject is thoroughly understood in the trade. The necessity is for active measures.

Mr. Moore says: "Honorable nurserymen will not in any way be offended by my remarks, and there are many such. Only the guilty may feel hurt; nevertheless the former sometimes unwittingly deceive purchasers in this way: The honest nurseryman may have a call for plants of some new sorts, of which he has no stock and purchase of some unscrupulous party who will label plants to suit the order. Not being acquainted with the appearance of the variety or the reputation of the party he buys from he supplies his customers with the falsely labeled plants under the impression that they are genuine. Hence the necessity of exclusive rights to a new variety by its originator and introducer, also the necessity of making it a misdemeanor to label plants falsely with intent to defraud, as an additional protection for purchasers of plants of common varieties as well as new ones. Many upright nurserymen are opposed to granting exclusive rights to new productions. Apparently only a few are long-headed enough to perceive its advantages to themselves. There is reason to believe it would prove the greatest stimulus to the nursery business and to horticulture generally that could be devised. More than twenty years ago a patent rights agent remarked to me, referring to the hostility of the Western New York Horticultural Society to this measure, 'Those nurserymen stand right in their own light. They would profit far more by it than the originators.'"

THE OUTLOOK.

There are indications that prices on nursery stock will be increased in the fall and next spring. The surplus in most lines has been disposed of and there is promise of a demand which will steadily increase. Many are unable to look at the prospect in this light, but there are some whose judgment, usually good, leads them to think there is hope for a still better trade. The spring sales were not discouraging; the calls for fall stock are coming in and it is probable that the Wilson bill which is holding everything back will be out of the way before the summer is past. One of the main points to be considered is the price of grain. With wheat at 55 and 60 cents per bushel, farmers are looking

about for a more profitable crop. The rapid increase in fruit growing during the last few years had attracted attention to that industry and many who have grown little or no fruit heretofore, are planning to devote considerable land to fruit culture. In the West the demand for trees has increased in large degree.

WORLD'S HORTICULTURAL SOCIETY.

The organization of the World's Horticultural Society which was formed in Chicago last summer, is progressing slowly. Prosper J. Berckmans, of Augusta, Ga., is the president; Henri L. DeVilmorin, of Paris, vice-president; and Professor L. H. Bailey, of Ithaca, N. Y. temporary secretary-treasurer at large. It is not expected that the society will hold definite meetings. Its purpose is to promote correspondence, interchange of plants and the publication of information. Nothing can be done until the various countries of the world have oppointed their officers. Secretary Bailey has recently received acceptances of various officers in different parts of the world and he has no doubt that within a few months' time the society may begin active operations.

In behalf of a committee of the Society of American Florists, charged with the preparation of a catalogue of the decorative plants handled by the American trade, for adoption as the official list of the society, the chairman, Professor William Trelease, of the Missouri Botanical Garden at St. Louis, asks all nurserymen to send him at once three copies of any catalogues or lists which they may have published within the last year. The assistance of the nurserymen will be greatly appreciated by the society.

Professor L. H. Bailey of Ithaca, N. Y., is engaged in the revision of Gray's "Field, Forest and Garden Botany," which is the only manual in North America which gives the names of cultivated plants. Professor Bailey is making the revision with particular reference to the needs of nurserymen and horticulturists in general. It is expected that the book will be ready for sale in July.

Subscribe for The National Nurseryman.

A PROBLEM SOLVED.

W. H. Dolby, Nicholsville, O.—"I owe you an apology for not sending you the dollar. But I am in a strait. I can't spare the dollar and I can't spare The National Nurseryman. But as I have some chance to get another dollar and no chance whatever to get another National Nurseryman I herein send the dollar with best wishes for your success."

Subscribe for The National Nurseryman.

THESE TREES WERE NOT BURNED.

On April 20th, Stark Brothers of Louisiana, Mo., offered every boy and girl in Pike County, Mo, whose parents would give him or her an acre of land, a free orchard. "We will give" said Stark Brothers, "seventy-seven apple trees, sufficient to plant the acre, of Ben Davis, Missouri Pippin and other standard sorts. Plant twenty feet apart north and south and twenty-eight feet apart east and west; if in the corn field so much the better, for a young tree to do its best needs only the same care necessary to grow a hill of corn—no more, no less. Let each tree represent a hill of corn; the acre will produce almost as much corn as without the trees, and will be worth $77 more by fall—for the decision of the New York courts is that each year's growth of an apple tree from the time of planting to bearing is worth $1. The income from these orchards is to be the boys' and girls' own. We will furnish 25,000 trees or more this spring, which means many new orchards for Pike county. The certain results will be to net yearly to her ambitious, industrious youths from $100 even up to $1200 or more per acre. The country needs more money making fruit, less 50-cent wheat and 30-cent corn. To the young orchardist who raises the most and best apples on his acre within a given time (to be named later) we will give 1000 trees, to the second 750, to the third 500, to the fourth 250.

On May 4th, the Louisiana *Press* said: "Parents with their sons and daughters flocked in from all points of the compass, on foot, on horseback, in wagons, livelier than a circus. 'First come, first served' was the order of the day. Seventy-seven trees were promised to each son and daughter, but 'every last one of them' got eighty-eight or more, to which was added a number of fine rose bushes, etc. The intense excitement reached the boys and girls of Pike county, Ill., and fond parents from across the river, came trooping into town and set up the claim that Stark Brothers had also nurseries in their fertile valley, and so should be counted in. Illinois as well as Missouri Pikers, however, are being cared for although the original proposition was intended only for the citizens of Joe Bowers' native 'state.' To date, 500 free orchards have been disposed of and the line of claimants is still unbroken, and the good work continues. Forty-five thousand trees have already been planted, besides 4,000 rose bushes. Although the 25,000 apple trees originally promised have been used and nearly as many more, the Messrs. Stark ask us to say that they still have several thousand each of apricot and plum trees. Owing to the great demand, each family had to be limited to two orchards—the remaining children, as well as others, can get these apricot and plum trees while they last."

JACKSON & PERKINS' NURSERY.

Attractive views of the grounds of Jackson & Perkins, at Newark, Wayne county, N. Y., are presented in this issue. The firm of Jackson & Perkins commenced business as market gardeners in 1864, making a specialty of small fruits, but some fifteen years since they began in a small way growing a few roses and hardy ornamentals and selling them at wholesale to dealers and other nurserymen. From the start they gave satisfaction to their customers and they have each year increased their planting and sales until they now have, in the several lines to which they give special attention, no superiors as propagators. They were especially fortunate in securing as their foreman one of the most successful men at such work in this country. This gentleman is thoroughly conversant with everything that has to do with the propagating and growing of all ornamental and nursery stock, and has entire charge of both the greenhouse aud outdoor work.

While they grow a large assortment of general nursery stock comprising the more valuable varieties of fruits, the principal attention of this firm is given to roses, clematis and fine ornamentals. In these lines they have been especially successful. Of clematis they are undoubtedly larger growers than any Holland firm, and they probably have the largest stock in this country. Their success with clematis has only been gained by many years of careful experimenting and painstaking study. Of roses their propagation reaches something like 175,000 yearly, and their stock has a well-deserved reputation for fine quality. Last season they successfully introduced a new climbing rose, the Empress of China, which takes the first place in its class as a perpetual bloomer. It has already found a large sale. They have several fine new roses to offer this year. A number of others, some of foreign importation and some of their own originating, they are thoroughly testing and will offer soon, if found to be of value. Of clematis they also have several new kinds on trial, one a Rocky Mountain variety which promises to be of considerable worth. In ornamental shrubs their newest thing is a beautiful white lilac of European importation which bears an immense truss of double flowers. The bunches of flowers are much larger than those of other varieties. Of all ornamental plants such as Japan snowballs, lilacs, wistarias, ampelopsis, honeysuckles, etc., which are so difficult to propagate successfully, and which add so much to the outside decoration of fine homes and grounds, they have large and fine stocks. Their collection of pæonias is probably the largest and best in this country, comprising the finest varieties obtainable in Europe, and many native sorts.

The greenhouses as shown in the frontispiece are ten in number. Two recent additions are certainly as complete and well equipped as is possible. They each cover 2,300 square feet and hold some 75,000 small roses and clematis. The interior view in the frontispiece partially shows one of these houses. The center bench is filled with clematis and on the side, the benches there having been taken out, are planted ampelopsis, both being grown to produce wood from which to propagate.

Jackson & Perkins make it the leading feature of their business to supply nurserymen and dealers with choice specialties as "leaders" for their salesmen. For this purpose they have correspondents in Japan and nearly all the European countries who have instructions to be continually on the look-out for new and valuable varieties in the ornamental line. When anything of supposed worth is found it is sent to them, thoroughly tested and if found to be of value is then offered to the public. They have no retail trade, their business consisting entirely in supplying retailers and dealers.

A WESTERN GROWER'S COMMENTS.

Regarding the spring trade, Stark Brothers, Louisiana, Mo., said recently: "The nursery business is no longer, if ever it was, the uncertain thing depicted by many; but of course the market has ups and downs, changes of fancy, etc, with trade shifting from place to place. A section takes immense lots of Ben Davis apple, say, for a year or two, then comes a lull; now one trouble with some of our growers is they have a big trade on one line, like Ben Davis, and depend on one region for their orders; soon there is a letup in planting caused by low prices or a failure or two of the apple crop and then the question is, where to market the Ben Davis? Some are still asking the question and sending out surplus lists of apple, not much else. With an apple crop, and good general crops, there will be few surplus apple lists around this time next year, for many western growers not only reduced their plant, but have poor stands; one cause was the severe rain storms of last May and June which injured grafts. Our Rockport plant escaped all disasters and promises for fall the finest, as it is the largest block of all whole root apple we have yet grown. Aside from apple, other stock for fall as well as the spring plants, about same as a year ago, considerable increase in peach, plum and pear. All buds escaped the blizzard of March 28th, which seems to have done so much damage further south; in fact the natural order of weather seems to be reversed, southern fruit growers and nurserymen suffering most; it seems we shall soon have to paraphrase our friend Heikes and write 'between the blizzard lines.'"

"Franklin Davis said years ago, 'grow good trees, good sorts, and don't bother about the future.' Forecasting is all right but some forecast the wrong way; they have a surplus and expect a good market, and vice versa. This speculative growing seems all wrong. A general and reg-

ular trade that can fairly be relied upon is the only trade worth having in the nursery business, then the element of risk is largely removed, nurserymen know what they are doing, can take a hopeful view, grow what they can sell, sell it. When dull times come, cover more territory, work all the harder.

"Some have found much of the worry and bother of the nursery business is selling stock before buying it; like the Iowa man they find themselves in hot water, customers howling 'Why don't you ship my trees,' etc. Western nurserymen who depend on getting supplies from the East in spring get left; stock comes in when season is about closed. It is not satisfactory to them nor can it be to the eastern nurserymen, and this one thing alone is a chief cause of the increase in size of western nurseries. The wise nurserymen, if he sells stock he does not grow, stocks up in the fall, fills his packing house full and avoids a good many sleepless nights on account of having shipments delayed. In fact much of the worry and bother can be removed by nurserymen simply running their business right: Packing houses indispensable, then never behind in shipping, no drying winds, no mud, no lost days, no keeping correspondent busy writing 'owing to the storm,' etc., like the Colorado nurserymen who sold 'only Colorado-grown trees' and when the great blizzard in the East a few years ago delayed his stock, found it necessary to send out second notices to customers reading 'owing to the storm East delivery postponed.' The query suggests itself: What have storms to do with Colorado-grown trees? Again, one nurserymen alone, and doubtless there were others in the same fix, had his entire deliveries packed and about ready to ship, dates set; storm came and he and his force and all of his friends found it no small job hauling straw for two days to save his trees from ruin. Then new dates to set and a thousand and one excuses given customers for change of mind, &c. Enough lost right here to have paid for a good packing house that would last for years. To say nothing of the economy and convenience resulting, the good of the stock should be considered, for how often is fine stock ruined by handlig in drying winds, sun, etc."

Among Growers and Dealers.

P. M. Koster of Boskoop, Holland, visited the principal nursery centers of this country during May. He sailed for Holland on May 19th.

L. Green & Son Co., Western Reserve Nurseries, Perry, O., report a good trade for the spring, an increase over the same season a year ago. They are planting the usual amount of stock.

Brown Brothers Company have purchased the Corwin farm in the town of Brighton, N. Y., consisting of 70 acres at a cost of $20,500 and are preparing to make it their packing grounds in the future. They will construct extensive cellars there.

George A. Sweet of Dansville, N. Y., went to Washington last month and secured a hearing before the tariff committee on the nursery stock clause. Mr. Sweet and other leading nurserymen are in favor of placing nursery stock on the free list.

Stephen Hoyt's Sons, of New Canaan, Conn., report a very busy season in nursery stock. The packing grounds of this firm cover ten acres; they employ 50 men packing orders during the rush of trade. One of their individual orders was for 40,000 apple trees, requiring 200 cases.

Judge Wellhouse, of Topeka, who owns 1,700 acres in orchard in Kansas, this spring planted 270 acres in Leavenworth county to apples. The trees were from his own nurseries, and consisted of three varieties. There were 170 acres of Gano, 75 acres of Ben Davis and 25 acres of Jonathan. The 25,000 trees were set in three days by thirty men, and the time between the taking the tree from the nursery and its establishment in its new quarters was only ten minutes.

John Hall, the well-known secretary of the Western New York Horticultural society, is now associated with Brown Brothers Company in the nursery business. Mr. Hall's long experience with James Vick and his six year's service in the life insurance business with one of the oldest companies, have fitted him especially for his new position. Mr. Hall is one of the most genial men in the trade and he has a wide knowledge of horticultural matters, especially in-so-far as they relate to the fertile territory of Western New York.

Isaac C. Rogers, manager of the Rogers Nursery Company, Moorestown, N. J., says: "Trade has been very good here this year; just about double that of last year, reaching between $11,000 and $12,000. Things are coming up all right for us now. We have received very satisfactory prices and a satisfactory trade in general. Trade has been particularly heavy in the line of small fruits, and we got away with a little over a million strawberry plants, mostly in retail orders. The demand for Japan plums was also heavy.

The members of the American Association of Nurserymen have been invited to visit the nurseries of Brown Brothers Company near Ridgeville, Ont., immediately after the adjournment of the convention at Niagara Falls. Carriages will convey the party through the Niagara fruit belt, a delightful drive of 12 miles. The nurseries comprise 230 acres on which are grown a full assortment of nursery stock, fruit and ornamentals. There are nine greenhouses on the grounds. This is the company's fourth season there. The nurseries are under the charge of Superintendent Charles Fisher who was with the Hooker company some time.

Subscribe for THE NATIONAL NURSERYMAN.

RECENT PUBLICATIONS.

The twenty-fifth annual report of the Fruit Growers Association of Ontario has been issued by the Ontario Department of Agriculture, at Toronto, by order of the Legislative Assembly. It is a valuable compendium of statistics regarding the fruit industry in the province. It is a book of 158 pages, comprising the constitution and by-laws of the association, a full report of the papers read at the annual meeting with the accompanying discussions, and much valuable matter in seven appendices. Photo-engravings of the president, T. H. Race, and of the exhibits of Ontario at the World's Fair are presented. Fruit growing has assumed large proportions in Ontario, and there is a marked improvement in the manner of fruit growing there as well as in the quality of fruit produced. The secretary-treasurer of the association, Linus Woolverton, is actively engaged in the advancement of the fruit growing interests of the province. He is editor of *Canadian Horticulturist.*

"Spraying Crops," by Clarence M. Weed, treating of spraying orchard fruits, nursery stock, small fruits, shade trees, ornamental plants and flowers, vegetables and field crops; "The Beautiful Flower Garden," by F. Schuyler Mathews, giving a treatment of the garden, with special regard to the picturesque, with many illustrations and with notes on practical floriculture by A. H. Fewkes; "All About Sweet Peas," a complete epitome of the literature of this fragrant annual, by Rev. W. T. Hutchins, are published in attractive form by W. Atlee Burpee & Co., Philadelphia. These books cover subjects more or less familiar but in a manner so interesting as to commend them to the attention of all who are interested in floriculture and horticulture. In them the practice of accepted experts is plainly told.

The fifth annual report of the Missouri Botanical Garden has been issued by Professor William Trelease, the director, under the direction of the board of trustees of the institution. The volume in its usual handsome form contains reports for the year 1893, anniversary publications, scientific papers and notes and observations by the director. There are numerous photo-engravings and carefully prepared plates. The volume is of special interest to botanists. There are in the herbarium 222,420 specimens. During the year 1,320 volumes and 1,344 pamphlets have been purchased and many volumes and pamphlets have been added by donation or exchange. The library contains 15,486 works valued at $25,268 52. One of the annual events at the garden is a banquet to florists, gardeners and nurserymen. During the annual convention of the Society of American florists in St. Louis last August 300 delegates visited the garden. A valuable feature of the fifth annual report is the article by J. C. Whitten "Phenological Notes for 1892 and 1893," giving tables showing the time of leafing, flowering and fruiting of herbaceous and woody plants.

From Various Points.

There is invested $800,000 in the culture of the prune in Idaho.

The twelfth annual meeting of the American Seed Trade Association will be held this month in Toronto.

The tenth annual meeting of the Society of American Florists will be held at Atlantic, N. J., in August.

A prominent business man of Erie, N. Y., has arranged for the shipment to London, Eng., next fall of fifty tons of grapes.

The twenty-fourth meeting of the American Pomological Society will be held in San Francisco next winter.

Grape growers to the number of 1370 have paid five dollars each for a share of stock in the Chautauqua & North East Grape Union.

According to the *Industrial American*, the Ben Davis apple so largely planted in Missouri and elsewhere in the West, is a native of Kentucky. It originated on the farm of Mr. Ben Davis of Montgomery county.

H. E. Van Deman, formerly pomologist in the United States Department of Agriculture, is contemplating a great work similar to that of the late Charles Downing on fruits and fruit trees of America.

Apples are something of a specialty in parts of Kansas and Nebraska. Shipments of 1,500,000 bushels from the latter state are announced for last year's crop. The number of apple trees in the state is given at five million.

A suit brought by a nurserymen in New York state against a telephone company for cutting and disfiguring a half dozen evergreen trees that interfered with their wires, has been decided in favor of the plaintiff.

Myron A. Hunt, treasurer of the Society of American Florists, president of the American Rose Society, treasurer of the Florists' Hail Association and of the National Chrysanthemum Society, died at his home in Terre Haute, April 23d, aged 56 years.

Professor C. V. Riley, for nearly twenty years government entomologist, has resigned his position at the request of his family who think that he has earned a rest. Professor Riley urged the appointment, as his successor, of L. O. Howard, who has been his chief assistant sixteen years. Professor Riley will retain his connection with the National Museum.

Arrangements have been made for the establishment of five fruit experiment stations in the province of Ontario, Canada. They will be located in Prince Edward, Simcoe, Huron, Wentworth and Essex counties, at an estimate expense of $1,000 for the first year. It is proposed soon to establish five other stations in the province. The work of each station will be devoted to a particular kind of fruit.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

W. T. HOOD & Co.,

OLD DOMINION NURSERIES.

350 Acres under Cultivation.

Richmond, Va.

FOR FALL 1894-SPRING 1895.

A very large stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs, Japan Pear Seedlings.

CELLAR, PACKING SHEDS AND BEST FACILITIES FOR HANDLING STOCK PROMPTLY.

COLOMBE BROTHERS,

USSY, (Calvados), FRANCE.

FALL OF 1894 AND SPRING OF 1895.

Mahaleb Cherry, 1 year, 4 to 8 m—m. Common Pear, 1 year, 4 to 6 m—m.
" " 1 " 2½ to 4 m—m. " " 1 " 3 to 4 m—m,

Other sizes of Mahaleb, Myrobolan, Pear, Apple, Quince, etc., at lowest prices. Also full assortment of Ornamentals.

LARGE, FINE STOCK THIS SEASON. CAREFUL GRADING. SUPERIOR PACKING.

ORDER EARLY.
Write and get my prices.

FRED. W. KELSEY,

. . . Sole U. S. Agent. 145 Broadway, New York.

GEYER BROS.,

ROCHESTER, N. Y.

APPLES, PEARS, PLUMS, PEACHES, CHERRIES, RASPBERRIES. ROSES, &c.

STOCK AT LOWEST WHOLESALE PRICES.

CORRESPONDENCE SOLICITED.

WE HAVE A STOCK OF

RAFFIA.

QUALITY VERY FINE.

PRICES QUOTED ON APPLICATION

Complete Assortment of Budding Knives and all kinds of Nurserymen's Tools.

Illustrated Catalogue Mailed.

WEAVER, PALMER & RICHMOND,

ROCHESTER, N. Y.

If You Are Alive . . .

To the Necessity of Keeping Posted about . . . . . .

THE NURSERY TRADE

You will lose no time in becoming a Regular Subscriber to . . . .

The National Nurseryman.

305 COX BUILDING. ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.

Levavasseur & Sons Nurseries,

USSY (Calvados) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

BEST GRADING QUALITY AND PACKING.

Send your List of Wants for Special Prices to

BERKHAN & OTGEN,

39 and 41 Cortland Street, = = New York.

Sole Agents for the United States and Canada.

Orleans Nurseries Co.,

ORLEANS, FRANCE.

Growers of fine Fruit Stocks, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application. . . . ,

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - New York.

HEADQUARTERS FOR

RAFFIA.

PRICES ON APPLICATION.

THOMAS MEEHAN & SONS, = = Germantown, Pa.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

Geneva Nurseries.

YOUNGERS & CO., Props.

. . GENEVA, NEB. . .

WE HAVE A LARGE SURPLUS OF

• SHADE TREES. •

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

When writing to advertisers mention The National Nurseryman.

REPORTS FOR 1893.

"Greenville and Crosbey."

BY THE AVERAGE OF EXPERIMENTAL REPORTS THIS YEAR,

"Greenville leads for Productiveness, Market, Home Use and General Purpose."

Crosbey still leads for "Hardiness and Reliability of Crops."

LITHOGRAPH PLATES, HANGERS AND CIRCULARS IN STOCK. . . .

Buds for Sale.

PRICES OF CROSBEY, GREENVILLE, ETC., ON APPLICATION.

The Farmers Nursery Co.,

TADMOR, OHIO.

T. C. WILSON,

East Side Nurseries. Established 1855.

. . BRIGHTON, N. Y. . .

I have to offer for Fall, 1894 and Spring, 1895, the following strictly first-class stock:

75,000 Apple Trees, **25,000 Standard Pears,**
10,000 Dwarf Pears, **15,000 Plum Trees,**
15,000 Cherry Trees, **10,000 Peach Trees.**

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

I Offer for Fall 1894.

Clematis.—Strong plants. Own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh; Crispa; Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.
Honeysuckle.—Hall's Japan, Monthly Fragrant.
Ampelopsis Veitchii. American Ivy.
Japan Snowball.—Strong, fine plants.
Roses, H. P's and Mosses.—Strong plants, own roots and budded.
Tea Roses.—Fine plants, 4 inch pots.
Tree Roses.—Elegant plants. Low price.
Oak-leaf Mt. Ash.—Elegant trees. Low price.
Weeping Mt. Ash.—Fine heads.
Cut-leaf Birch.—8 feet, perfect trees.
Purple Birch.—4 feet, **true purpurea.**
Young's Weeping Birch.—5 feet stems.
Lilac, Weeping Pendula.—5 feet, not budded on lilac.
Hydrangea P. G.—A fine lot of strong plants.
Flowering and Foliage Shrubs.—Fine assortment.
Paeonies.—A grand collection.
Paeonies, Tree.—Nice plants in quantity.
Gooseberries.—In variety; 2 year Plant.
Blackberries.—Strong, nicely trimmed to one cane.
Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry, North Star.
Grape Vines.—A complete assortment.
Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

Baltimore and Richmond Nurseries.

Peach Pits. . . . .

We offer for immediate shipment a very superior and well selected lot of PEACH PITS, both Smock and Promiscuous, all of crop of 1893, sound and in splendid condition, and offer as follows, payment Fall 1894.

Smock and Promiscuous. .

We would urge securing at least a portion of what you will need for this season, and believe you will obtain better results from early bedding.

Pits of this year's crop will be scarce and high.

We deliver at railroad depot in this city free of charge.

We are wholesale growers of general nursery stock and invite correspondence.

Japan Pear Seedlings. . .

For Fall 1894. Write us later for prices.

Franklin Davis Nursery Co.,

BALTIMORE, MD.

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . . HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WE are still in the market with our **Dry Baled Moss**, and at prices to correspond with the hard times. We wish to exchange for Fall '94, Pears, Plums and Cherries. Also have a good stock of Dwarf Juneberry and High Bush Cranberry.

Z. K. JEWETT & CO., Sparta, Wis.

---

600 ACRES. ESTABLISHED 1852. 13 GREENHOUSES.

PHOENIX NURSERY COMPANY.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

Nurserymen and Florists, Wholesale and Retail.

Correspondence solicited and promptly answered. Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. **BLOOMINGTON, ILL.**

John Waterer & Sons, Lt'd,

NURSERYMEN,

BAGSHOT, ENGLAND.

RHODODENDRONS AND OTHER HARDY EVERGREENS.

Correspondence solicited.

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON.

Write me for easy terms and prices. TOMAH, WIS.

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,

ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS, MAGNOLIAS, LILAC, ETC. . . . . .

AGENT FOR UNITED STATES AND CANADA.

ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK.

Gilbert Costich, Rochester, N. Y.

SURPLUS FOR SPRING, 1894.

Apple, Cherry, Dwarf Pear and Plum, Evergreens, Ornamental Trees, Etc.

Nurserymen's Stock Book.

COMPLETE AND PRACTICAL.

Size, 16x21 inches.—58 pages. Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,

ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.

WE WANT YOUR TRADE.



The Gelhaar, Fleming & Fuller Printing Company, Incorporated,

NURSERY · PRINTERS,

Cook Opera House Building. ROCHESTER, N. Y.

TELEPHONE 989. ORDERS BY MAIL A SPECIALTY.

We refer to THE NATIONAL NURSERYMAN as a sample of our work.

CAN WE HAVE IT?

NURSERIES.

Rochester, N. Y.
Ridgeville, Ont.

OFFICES:

Rochester, N. Y.
Chicago, Ill.
Toronto, Ont.
Portland, Ore.

Brown Brothers Company,

CONTINENTAL NURSERIES,

. . . . . ROCHESTER, N. Y.

WE have a general assortment of Fruit and Shade Trees, Roses, Clematis, etc., at wholesale, and shall be pleased to give estimates on either large or small quantities.

We shall be pleased to hear at once from any desiring to spend the day following the Convention in driving through the beautiful Niagara District to our Nurseries, so that we can provide suitable conveyance for the party. We anticipate a profitable day for all.

HAVING purchased packing grounds, we offer for sale the lease of our present yard, 6½ acres, running two or three years with every probability of extension as long as desired. We have R. R. Switch, also platform and packing buildings complete, which will be figured close rather than remove them.—BROWN BROS. CO.



Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

July, 1894.

Painesville Nurseries.

FRUIT AND ORNAMENTAL TREES—SMALL FRUITS AND GRAPE VINES—SHRUBS AND ROSES—PLANTS AND BULBS.

Largest assortment of new and old varieties; unequaled facilities for prompt and accurate filling of all orders; immense storage cellars and packing houses.

WEEPING DECIDUOUS TREES.

Splendid stock; Tea's Weeping Mulberry, Mountain Ash, Camperdown Elm, Kilmarnock, New American and Wisconsin Weeping Willows, Cornus Pendula, Young's Birch, Whiteleaf Linden, etc.

Full line Upright Deciduous and Evergreen Ornamental Trees, Poplars, Maples, Tulips, Flowering Thorns, Magnolias, Elms, Catalpas, Purple-leaved Beech, Norway Spruce, Pyramidal Arbor Vitæ, etc.



CAMPERDOWN ELM.



Large stock Blackberries, extra fine plants from root cuttings, including a large lot of Ancient Briton, the best hardy market variety. All the leading kinds of Currants, Gooseberries, Raspberries, Strawberries, etc., in large supply.

Fine stock Mulberries and Nut trees, American Chestnuts from 1 year seedlings to 6 to 8 feet, at low rates.

Handsome blocks of Standard and Dwarf Pears, Plums Cherries and Peaches.

ROSES.

12 acres of strong field-grown plants. No better stock in the U. S.

Bulbs for Fall trade direct from the best Holland and French growers. Highest quality at low rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. **1000 ACRES.** **28 GREENHOUSES.**

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

"The most complete nurseries on the American Continent."—*American Rural Home.*

MT. HOPE NURSERIES,

Established 1840.

ROCHESTER, N. Y.

Fruit Trees,
Small Fruits,
Ornamental Trees and Shrubs,
Evergreens,
Roses,
Hardy Plants.

The Most Complete Collections in America.

Correspondence Solicited. Catalogues Free.

ELLWANGER & BARRY, PROPRIETORS.

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

KAWANA, MITCHELL CO., N. C.
(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

In addition to the fine Cut-leaf Weeping Birch offered last month, I have a good assortment of Plums, first-class medium and half inch; also 5,000 dwarf Duchess Pear, 2 and 3 years; a few hundred Seckel and Clapp's Favorite standard Pear, 1 inch and over, 7 to 9 feet; standard Pear ¾ and ⅝; few thousand No. 2 and No. 3 Peach, plenty of Elberta in the lot; few Mountain and Oak-leaved Ash, and about 2,000 roses.

This stock was raised to sell, and is going to be sold. Prices given with pleasure.

JAY WOOD,
KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

Newark, Wayne Co., New York.

GROWERS OF CHOICE SPECIALTIES for Nurserymen and Dealers.

ROSES, Hybrid Perpetual.—Mosses and Climbers; strong two year old plants on own roots; much superior to imported stock as they are strong, acclimated and true to name. Budded plants of those kinds which can not be grown on own roots.

CLEMATIS.—The largest stock in this country; Jackmanni, Henryii, Ramona, Paniculata, Duchess of Edinburg, Velutine Purpurea, Madame Grange, Lanugiosa Candida, Lord Neville, Sir Garnet Wolseley, etc. Over twenty-five varieties; extra strong, well-rooted plants.

HONEYSUCKLES.—An extra large and fine stock of Hall's Japan; also Monthly Fragrant, Scarlet Trumpet, Red Tartarian, etc.

HYDRANGEAS.—Paniculata Grandiflora, both tree-form (3½ to 4 ft. high) and bush-form. Otaksa, fine strong plants.

JAPAN SNOWBALLS.—Extra large, strong plants.

LILACS.—A large stock; strong plants; good assortment.

CHINESE PURPLE WISTARIAS. AMPELOPSIS VEITCHII.

PAEONIAS.—Large undivided tubers; the finest varieties obtainable in France or Italy.

EVERGREENS.—Austrian Pine, Norway Spruce, American and Siberian Arbor Vitae, Yew Compacta, Irish Juniper, etc. All liberally graded, healthy and of good color.

Also a full line of Altheas, Berberries, Deutzeas, Purple Fringe, Silver Bell (or **Halesia Tetraptera**), Syringas, Thorns (Paul's New Red and White), Weigelias, etc.

ORNAMENTAL TREES.—Cut-leaf Birch, Kilmarnock Willows, Tea's Weeping Mulberry, Double Red Flowering Horse-Chestnut, Catalpas, Norway Maples, Oak-Leaf Mountain Ash, American Elms, etc.

CURRANTS.—Both tree and bush-form; a full assortment and large stock of extra strong plants.

GOOSEBERRIES.—Extra fine three year old Industry; also Downing, Houghton, Smith's Improved, etc.

GRAPE VINES.—A good assortment.

FRUIT TREES.—A large stock; extra fine blocks of Apples, Plums, Quinces, Standard and Dwarf Pears.

Write for our new trade-list just out. Special prices on good sized lots.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing.*

Send for Price-list and Circulars.

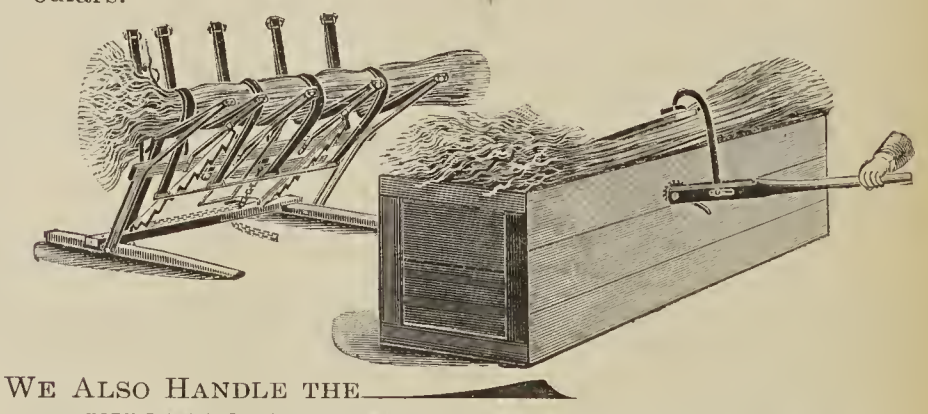
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes

You will save time and money to buy this clamp and *throw away all other styles* of clamp.

It is *simple* to use as a *cant hook.* Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Balers, Clamp and Truck.

STEVENSON & THOMAS, = = NORTH BEND, NEB.

When writing to advertisers mention The National Nurseryman.

THE BEST ROSES,

Azaleas, Rhododendrons, Clematis, Etc., are supplied by the

BOSKOOP HOLLAND NURSERY ASSOCIATION.

For catalogues and prices address, **C. H. Joosten,**

3 Coenties Slip, New York.

C. F. McNAIR & CO.,

DANSVILLE, N. Y.

A large stock of young Apple, Standard and Dwarf Pear, Plum, Cherry, Peach, etc., for Fall '94 and Spring '95.

BUDS FURNISHED IN LARGE ASSORTMENTS AT LOW RATES.

Write for Prices, &c.

Correspondence Solicited.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Stake Labels FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	inch;	1 1-2	x	5-16	inch.
18	"	1 1-2	x	1-2	"
21	"	1 3-4	x	3-4	"
24	"	2	x	3-4	"
27	"	2 1-2	x	7-8	"
30	"	3	x	7-8	"

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. Samples Free.

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

When writing to advertisers mention The National Nurseryman.

WAKE UP!

If you want to secure the best prices it is time you were placing your order. **Prices will advance.** We are prepared to offer to the trade in **car load** lots an extra fine stock of **Apple, Cherry, Peach, Plum and Pear, (Keiffer especially.)** Also a general assortment of Evergreens, Ornamentals, Small Fruits, etc., etc.

Knight's Improved Currant, the most productive known.

SEEDLINGS, Apple, Mariana Plum Stock, Imported Pear, Mahaleb and Myroholan Stock.

SPADES.

The best Spade for the money ever offered; try them and be convinced. You cannot afford to be without them. **20 dozen sold last year.** Ask W. F. Heikes, Huntsville, Ala.; Geo. Peters & Co., Troy, O.; L. G. Bragg, Kalamazoo, Mich; Hoover & Gaines, Dayton, O.; and others what they think of them. (See circular.)

Correspondence and Personal Inspection Courted.

ALBERTSON & HOBBS,

Bridgeport, Marion Co., - - - - Indiana.

Fine Wholesale stock of the two new Hedge plants,
LIGUSTRUM MEDIA, LIGUSTRUM IBOTII,

Splendid stock of **RUSSIAN GOLDEN BARKED WILLOW, RED CORNEL, FORSYTHIA SUSPENSA, HYDRANGEA PANICULATA** (Type.) **WHITE SPRUCE, NORWAY SPRUCE. CLEMATIS PANICULATA,** Splendid stock in all grades from extra heavy to mailing sizes

Immense stock of Hardy Perennials, including best varieties of **IRIS, PHLOX, PYRETHRUMS, PÆONIES, HOLYHOCKS, LARKSPURS, ETC., ETC.** over a thousand distinct species and varieties.

THE READING NURSERY, (Established in 1854.)

JACOB W. MANNING, Proprietor, **READING, MASS.**

Wholesale Lists ready; write if you have not received one.

1838. 56 Years. 300 Acres. **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifoliate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS,

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES,

WILLIAM PARRY,
PARRY, N. J.

When writing to advertisers mention The National Nurseryman.

ESTABLISHED FIFTY-TWO YEARS.

Brighton Central Nurseries.

In the June issue of this Journal I told those who were intending to purchase Nursery Stock for their Fall trade to defer ordering until they saw our unparalleled offers in the July issue of this Journal. But for good and sufficient reasons that will benefit our customers in the near future, I have decided to further postpone the issuing of any Price List until August first. But, in the meantime, if you are in the market for special bargains, in car-load lots for early and late Fall shipments of any of the following stock which I name, it will pay you to write me. . . . . .

Plums, Standard and Dwarf Pears, Cherries,

Quinces, Standard Apples,

Weeping Cut Birch, and Currants,

Out of blocks that were never dug from.

I am also a heavy grower of Ornamental Stock, Shrubs, Roses, Nut Trees, Weeping Deciduous Trees that I should be pleased to price you on application. . . . . .

J. Frank Norris,

BRIGHTON, N. Y.



MEMBERS OF THE AMERICAN ASSOCIATION,
NIAGARA FALLS, JUNE 6-7, 1894.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

RECEIVED U.S. DIVISION OF STATISTICS

VOL. II. ROCHESTER, N. Y., JULY, 1894. NO. 6.

THE AMERICAN ASSOCIATION.

PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING AT NIAGARA FALLS.

AN UNUSUALLY LARGE ATTENDANCE—LIVELY DISCUSSION ON THE SUBJECT OF TARIFF ON NURSERY STOCK—ASSOCIATION IN FLOURISHING CONDITION—OFFICIAL JOURNAL PROVIDED—ASSISTANCE FOR THE ORIGINATOR OF THE CONCORD GRAPE—INTERESTING PAPERS ON TRADE TOPICS—MEMBERS PRESENT—THE EXHIBITS—NOTES.

The nineteenth annual convention of the American Association of Nurserymen was held at the Cataract House, Niagara Falls, June 6th and 7th. The attendance was unusually large, nearly every state in the Union being represented. Among those present were: George Achelis, West Chester, Pa.; H. S. Anderson, Union Springs, N. Y.; M. Ansley, Geneva, N. Y.; E. Albertson, Bridgeport, Ind.; George G. Atwood, Geneva, N. Y.; N. H. Albaugh, Tadmor, O.; Robert Ades, Rochester, N. Y.; William C. Barry, Charles J. Brown, Rochester, N. Y.; Professor L. H. Bailey, Ithaca, N. Y.; L. G. Bragg, Kalamazoo, Mich.; Edward Bacon, Dansville, N. Y.; David Baird, M. E. Baird, Manalapan, N. J.; Guy A. Bryant, Princeton, Ill.; R. J. Bagley, New Haven, Mo.; H. Berkhan, New York; W. D. Beatie, Atlanta, Ga.; Nelson Bogue, Batavia, N. Y.; Duane Bogue, Medina, N. Y.; Thomas W. Bowman, Rochester, N. Y.; L. O. Bobbink, Boskoop, Holland; H. G. Bryant, Fremont, Neb.; John M. Burke, Dansville, N. Y.; P. W. Butler, East Penfield, N. Y.; J. L. Bennett, Geneva, N. Y.; Howard A. Chase, Philadelphia, Pa.; George W. Campbell, Delaware, O.; E. T. Coe, New Haven, Conn.; C. S. Curtice, Portland, N. Y.; E. P. Clark, Dansville, N. Y.; W. B. Cole, Painesville, O.; Charles J. Chism, Brighton, N. Y.; J. H. Clark, Fredonia, N. Y.; Andre L. Causse, New York City; Lewis Chase, John Charlton, Gilbert Costich, Rochester, N. Y.; J. Cole Doughty, Lake City, Minn.; J. H. Dayton, Painesville, O.; Howard Davis, Baltimore, Md.; Robert Douglas, Waukegan, Ill.; L. J. Farmer, Pulaski, N. Y.; Wm. Flemer, O. H. Felmly, Roselle, N. Y.; Wm. Fell, Hexham, England; B. E. Fields, Fremont, Neb.; H. W. Freeman, Tadmor, O.; J. W. Gaines, Dayton, O.; Hiram Gregory, Lockport, N. Y.; J. J. Glen, Rochester, N. Y.; J. J. Harrison, Painesville, O.; W. T. Hood, Richmond, Va.; D. Hill, Dundee, Ill.; C. V. Heikes, Troy, O.; J. H. Hale, South Glastonbury, Conn.; W. F. Heikes, Huntsville, Ala.; W. W. Hoopes, West Chester, Pa.; T. S. Hubbard, Geneva, N.Y.; F. M. Hartman, Dansville, N. Y.; H. Hooker, John Hall, H. V. Hobbie, Rochester, N. Y.; W. A. Hatton, Hamilton, Ont.; H. S. Hurd, Burlington, Ont.; J. E. Ilgenfritz, C. A. Ilgenfritz, Monroe, Mich.; Z. K. Jewett, Sparta, Wis.; W. B. K. Johnson, Allentown, Pa.; George S. Josselyn, Fredonia, N. Y.; C. H. Joosten, New York City; Martin King, James Kelly, James M. Kennedy, Dansville, N. Y.; Harlan P. Kelsey, Kawana, N. C.; George H. Lewis, Monroe, Mich.; Charles Little, J. F. Lee, Rochester, N. Y.; George Leslie, Toronto, Ont.; E. Morris, Fonthill, Ont.; J. F. Meehan, Germantown, Pa.; B. F. Manning, Jacob W. Manning, Reading, Mass.; E. M. Moody, George H. Moody, Lockport, N. Y.; E. Morden, Niagara Falls, Ont.; J. Horace McFarland, Harrisburg, Pa.; Thomas B. Meehan, Germantown, Pa., J. D. Murphy, C. W. McNair, Sidney L. Morey, C. F. McNair, J. B. Morey, Jr.; A. J. Murphy, Dansville, N. Y.; S. C. McKown, Rochester, N. Y.; Daniel McCarthy, Lockport, N.Y.; H. E. Merrill, W. L. McKay, Geneva, N. Y.; J. Morrison, Cadiz, O.; C. J. Maloy, Rochester, N. Y.; William Nolan, Dansville, N. Y.; A. W. Newson, Nashville, Tenn.; J. Frank Norris, Brighton, N. Y.; P. Ouwerkirk, Jersey City; W. B. Otwell, Carlinville, Ill.; U. B. Pearsall, Fort Scott, Kan.; C. H. Perkins, Newark, N. Y.; E. C. Pierson, Waterloo, N. Y.; U. B. Peters, W. J. Peters, Troy, O.; E. H. Pratt, Fredonia, N. Y.; William Pitkin, Rochester, N. Y.; D. H. Patty, Geneva, N. Y.; E. H. Ricker, Elgin, Ill.; L. Roesch, Fredonia, N. Y.; E. W. Reid, Bridgeport, O.; Irving Rouse, Rochester, N. Y.; Isaac C. Rogers, Moorestown, N. J.; August Rhotert, New York City; N. C. Smith, Geneva, N. Y.; E. M. Sherman, Charles City, Ia.; F. H. Stannard, Ottawa, Kan.; Iowa Smith, Springfield, O.; F. E. Schifferli, Fredonia, N. Y.; H. M. Simpson, Vincennes, Ind.; L. O. Sweetland, Rochester, N. Y.; E. D. Smith, J. W. Smith, Winona, Ont.; C. W. Stuart, Newark, N. Y.; J. Tweddle, Stony Creek, Ont.; Jacob Uhl, Dansville, N. Y.; J. Van Lindley, Pomona, N. C.; S. D. Willard, Geneva, N. Y.; N. A. Whitney, Franklin Grove, Ill.; S. C. Wood, Jay Wood, Knowlesville, N.Y.; H. S. Wiley, Cayuga, N. Y.; R. A. Wickersham, Winchester, Va.; Eugene Willett, North Collins, N. Y.; H. J. Weber, Nursery P. O., St. Louis, Mo.; C. L. Whitney, Warren, O.; G. W. Whitney, Dansville, N. Y.; A. L. Wood, Rochester, N. Y.; B. T. Weldy, West Charleston, O.; S. E. Wheelock, Fredonia, N. Y.; George A. Sweet, Dansville, N. Y.; C. L. Yates, T. B. Jenkins, Rochester N. Y.

The convention was called to order by President U. B. Pearsall who delivered the following address:

"MEMBERS OF THE ASSOCIATION, the hour designated for our meeting has arrived. It becomes my pleasant duty to call you to order for the transaction of business. Our place of meeting is indeed an appropriate one. Within this beautiful city and its immediate environments, the student of nature can find more of interest and a more complete exemplification of the power, wonders and beauties of nature than elsewhere in any like area. It is therefore especially appropriate to men of our avocation to convene here to deliberate and discuss questions affecting our business and receive those great benefits, resulting from a personal conference, such as cannot be acquired by correspondence.

"Coming here, fresh from our fields of labor, where we can lay aside, for the time being, our immediate cares and combine pleasure with business, it is self-evident that the surroundings are such as enable us to draw additional inspiration therefrom, such as will be conducive to our advancement, both mentally and physically. No other avocation is as trying as ours upon the nervous system. The haste, excitement and worry incident to the inevitable rush of Fall and Spring deliveries is trying in the extreme, and when the relaxation comes we need such meetings as this to revive our energies and recuperate our health, hence the change of surroundings is very essential to us all. No branch of business furnishes greater opportunities incident to its business transactions, or makes a more pressing demand upon the mind and body than horticulture; as exemplified by managing an extensive nursery. These trials and perplexities were graphically and truthfully illustrated in rhyme by Hon. N. H. Albaugh, of Ohio, several years ago. Recognizing these conditions, it is especially proper that we should assemble annually for the double purpose of rest and information. In order to excel in our avocation, we must become close students of nature and nature's laws, and to do this requires close observation and earnest, persistent study. To the successful horticulturist, such study becomes a source of pleasure, and when among his trees and shrubs, he can almost hold communion with them, and by frequent contact, they become a part and parcel of his life work; making him at times oblivious to all else beside. To know the silent forces of nature and how to apply them is no less the study of the horticulturist than the scientist, hence it follows as a very natural result that the development of mind and character is such as to produce a well-balanced complete manhood, and fit one for the highest forms of citizenship, whether in the field or forum, and of such, Hon. Jeremiah Rusk (deceased) and Hon. Norman J. Coleman, both ex-commissioners of agriculture, are notable examples.

"The past year has been a trying one for all branches of business. When we adjourned in Chicago last year, I must confess that it was with grave apprehensions as to the future that we parted to return to our homes, each to do all that was possible to meet the situation which portended serious disaster. It is therefore extremely gratifying to be able to say that the nurserymen of this country have passed through the trying ordeal of the past year of financial and industrial depression with comparatively few disasters, and taking into consideration the perishable nature of our products, it is truly wonderful how we escaped with such slight losses.

"It is doubtless true, that in the case of nurserymen especially we are very largely indebted to the able, earnest and persistent efforts of the horticultural press of the country which has created an increased demand for our products, the extent of which it is impossible to estimate and hence, notwithstanding the unprecedented unfavorable conditions, it is probable that no more than the average percentage of stock has been consigned to the brush pile, or allowed to stand and become overgrown. In the May number of THE NATIONAL NURSERYMAN, of Rochester, to which periodical all of you are doubtless subscribers, (or if not, you should be), a review is given which fully confirms these conclusions.

"It is evident that as our country becomes more densely populated and as we advance to a higher stage of civilization, the consumption of fruits is rapidly increasing in a ratio far in excess of the increase of the population. The result has been attained, not alone by horticulturists, but the medical profession as well, in all its branches, have become active co-workers, not from any desire to especially benefit our avocation, but from the fact that the liberal use of fruit in connection with other articles of diet is universally conceded to be necessary and conducive to both physical and mental development. The system of rapid transportation has also been a potent factor in promoting increased consumption, while the system of commercial orchards under intelligent management has been the crowning factor which has saved us from disaster. Let us hope that the crisis has passed and by careful conservative management try to avoid an over production, which would be ruinous to all, and in this connection let us not forget that it was only the comparatively light supply, coupled with the auxiliary aid herein recited that saved us. We therefore should not increase, but if anything, curtail our planting. This is especially true of apple trees and grape vines, which are superabundant at this time. Taking the most hopeful view of the future, we cannot reasonably expect a rapid return to the prosperous conditions existing prior to the panic. Therefore we should adjust ourselves to the existing circumstances, bearing in mind that we had better have an under, than an over production.

"Let it be our constant study to extend the introduction of new kinds and classes of fruits, which will diversify and increase consumption, and above all, let us actively co-operate with the introducers of preventives and remedies for destruction of the thousands of insects and fungi which are the great enemies of the fruit grower. To this end the system of spraying is practically more effective than all others, but the liberal use of wood ashes, or potash in its various forms will be found a great

auxiliary, for perfectly healthy trees are less liable to infection or ravages from insects than those which are only in a fair state of vigor. In this connection, I commend the results of various national and state experimental stations to your careful consideration. We can congratulate each other that the results have not been more unsatisfactory, and let us all resolve to carefully co-operate with each other in promoting our welfare and conducting our business in such manner as to ensure success.

"UNFAIR RESTRICTIVE LEGISLATION.—The quarantine and inspection laws first passed by California have been adopted by other Pacific coast states, and even Colorado has followed in the van. These laws, while passed under the guise of quarantine and inspection, really are intended to and do place an embargo upon shipments of nursery stock into those states. This creates a monopoly for the growers there, while excluding even better grown and healthier stock than is raised within their states. If these laws were amended so as to provide for the appointment of inspectors outside of these states at the expense of the shipper, so that the seller could have his stock inspected prior to shipment, then both buyer and seller could know what to rely upon and there would be an element of fairness in such laws, but most of us have learned by experience that rejection and confiscation is their rule and inasmuch as it would confiscate the stock to return it (as it would generally be ruined in transit), it operates to prohibit nearly all such commerce between the states, and, in fact, inasmuch as stock in those states themselves is already infected with the insects and fungi which they claim to wish to exclude, it is apparent that the primary object is to exclude the importation, whether healthy or not. I commend this matter to your careful consideration, and it is possible that by proper effort we might procure amendments as therein suggested.

"FREE TRADE BETWEEN THE STATES.—Another way to eliminate the discriminating features of such laws would be to get an act of congress passed, providing for free trade between the states, and in such act, make it mandatory that states passing such inspection laws upon trees and plants shall provide for the inspection of such property outside the state at such railroad point as may be designated by parties wishing to ship such trees and plants; the shipper to pay all expenses of such inspection at the same rate charged for similar service within the state; then further provide that any state law not containing such provisions shall be held to have been enacted for the primary object of excluding such products from such state in violation of clause 2 of section 10 of article 1 of the constitution of the United States, which provides:

"'No state shall, without the consent of congress, lay any imposts or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws.'

"Now it is self-evident that trees and plants can be n spected even more thoroughly at the point where grown, prior to packing and shipping, and the perishable nature of such articles at terminal points makes rejection mean confiscation. I trust you will give this matter the attention which its importance demands.

"I hope that your deliberations here may be harmonious, pleasant and profitable, and as we look forward to each succeeding meeting, let us vie with each other to make these meetings of such paramount interest as to induce all nurserymen to become members, whether they attend or not.

"Again, thanking you for the honor conferred upon me by choosing me as your president for the past year, I will now proceed to the regular order of business, as formulated by your executive committee."

The report of the treasurer, N. A. Whitney, showed that the gain of surplus over last was $300. There is a balance on hand of $1,380.

J. H. Hale of South Glastonbury, Conn., was announced to speak on "The Most Profitable Methods of Introducing New Fruits." He said it was a subject selected for him and one which he knew little about. He thought all should take a broader view of the question than that of mere dollars and cents, and he believed there were more of this class among horticulturists and nurserymen than any other profession. The large profits credited to introducers generally, have usually been greatly exaggerated. While there are many thousand dollars of fruits to be sold annually, and people like to experiment and commercial horticulturists are constantly on the look-out for new things, yet they learned, some years ago, to buy sparingly of novelties, and then, if suited to their locality, propagate them themselves. He was frank to confess that he really did not know what the best methods were.

A committee of vice-presidents composed of one representative from each state, was made a committee on nominations and to suggest places for the next annual meeting. The convention then adjourned for dinner.

At 2:30 p. m. the committee on nominations presented the following report which was adopted: President J. H. Hale, South Glastonbury, Conn.; vice-president, N. H. Albaugh, Tadmor, Ohio; treasurer, N. A. Whitney, Franklin Grove, Ill.; secretary, George C. Seager, Rochester, N. Y.; executive committee, Irving Rouse, Rochester, N. Y.; W. J. Peters, Troy, O.; D. S. Lake, Shenandoah, O.

The association decided to hold its next annual convention in Boston. The motion to this effect was reconsidered and Indianapolis was selected as the place of meeting in 1895. The date was changed from the first Wednesday in June to the second Wednesday in June.

The attention of the members was called by Mr. Willard, of Geneva, to the fact that the treasurer, N. A. Whit-

ney, had done his work for years without compensation and had even paid the postage necessary. Upon Mr. Willard's motion the association voted to pay the treasurer a salary of $50.

Professer Bailey explained the importance of the meeting of the American Pomological Society in California next winter. J. H. Hale thought such a meeting would be worth attending. In regard to the expenses of the trip, Mr Hale stated that a party of 22 had made the trip in a special car and staid away about five weeks at an expense of from $130 to $175 each. Mr. Albaugh estimated the expenses much higher, about $225. The latter also advised the members to go as pomologists rather than as nurserymen, as there is considerable rivalry between the growers of the East and those of the Pacific coast. As an outcome of this discussion the secretary of the society was instructed to send a copy of the proceedings of this meeting to the secretary of the American Pomological Society and request that he notify members of the American Association when arrangements for the California meeting have been made.

It was reported that E. W. Bull, the originator of the Concord grape, the most popular and the leading commercial representative of American grapes, was in need of financial assistance. Contributions for a purse for Mr. Bull were asked for and the sum of $100 was promptly raised for the purpose.

William C. Barry, of Rochester, advocated a change in the time of meeting to December, but the majority preferred a date in June. It is still thought that the nurserymen have more time to devote to the meeting in the summer.

THE EXHIBITS.

There were several exhibits at the convention. No list of the articles or the exhibitors was furnished, but a committee appointed by President Pearsall prepared a brief report. Among the exhibits were evergreens from D. Hill, Dundee, Ill.; the Ricker National Nursery Company of Elgin, Ill., and the Niagara River Nurseries, Youngstown, N. Y.; the Greenville strawberry from the Farmers' Nursery Company, of Tadmor, O.; a portable appliance for applying "Fostite" from a wagon to small plants or large-sized trees, from C. H. Joosten, New York City; the Lehigh strawberry, from W B. K. Johnson, of Allentown, Pa ; fruit plates from the Rochester Lithographing Company, Rochester, N. Y.; the Tom Walker, Tadmor and Western Union strawberries from Ohio nurserymen, and plums and peaches on branches from Henry Lutts, of Youngstown, N. Y. All the exhibits attracted much attention. The Greenville strawberry was regarded with wonder and admiration by all who were not acquainted with it. The peculiar merits of the other strawberries exhibited were especially noticed. One of the most attractive exhibits was the spraying apparatus shown by Mr. Joosten of New York city. A magazine is fitted to a common wagon and the movement of the wagon operates the magazine distributing the powder which is a preventive and cure for mildew, black rot, leaf blight, etc. A tube of rubber or iron conveys the powder to large bearing trees when desired. Smaller sizes, which have been used effectively for some time by nurserymen and florists, were shown. The large distributor was purchased on the spot by William Scott, the well-known florist of Buffalo, for use on his large carnation farm at Corfu. The Elgin Nurseries and D. Hill, of Dundee, Ill., exhibited unusually fine specimens of young evergreens, packed singly in soil and sewed securely in sacking. Nearly every kind was shown and the exhibit was large. Mr. Lutt exhibited branches of plums and peaches all well set with fruit. These formed an object lesson in spraying. Great benefit was shown. The Japanese plums came in for a large share of admiration.

NURSERY INDUSTRY IN THE EAST.

W. C. Barry, of Rochester, N. Y., read a paper on "The Nursery Industry in the East." He said the nursery industry was in its infancy fifty years ago, and today it is recognized as one of the great commercial industries of the time. He gave a rapid resume of the half century's work, referring briefly to "those pioneers and veterans who years ago in a wilderness, amid difficulties and obstacles of no ordinary character, bravely and successfully laid the foundation of that magnificent structure to which we so proudly point to-day, and which will be for all time to come a monument to their zeal, enterprise and foresight." As early as 1840 the science of pomology was systematically and enthusiastically studied. Speaking of the nurseries at Rochester in 1840, Mr. Barry said that in that year the efforts being made at Rochester attracted notice, and Ellwanger & Barry are reported by Mr. Bateman in the *Genesee Farmer*, February, 1841, as having made "large improvements." "They have seven acres under cultivation and the location is a beautiful one, near the cemetery, about a mile from the city. They are making arrangements for planting an extensive nursery, and if industry and skill will insure success, these young men will surely succeed. The nursery of Asa Rowe, six miles from Rochester, is the oldest and most extensive in this vicinity." About this time Geneva and Syracuse became prominent and the Maxwells and Smiths, and Smith & Hanchett, of Syracuse, began to propagate and grow nursery stock. The advancement of horticultural taste, and the rapid extension of orchards were noticed by the speaker, who included the Downings, the veteran J. J. Thomas, Patrick Barry, F. R. Elliott, and J. A. Warder, as among those who were then making a special

study of pomology, each of whom in turn published the results of his experiences and investigations in book form, and thus gave a new and great impetus to fruit culture throughout the land. Nurseries sprang up everywhere; fruit culture became almost a craze, and planting was extensively indulged in from Maine to California. So that fruit growing in a short time became a great and profitable industry, aiding materially in the development of the country and increasing its wealth and prosperity. And now, in these latter days "our tables are furnished with luscious fruits the year around, fruits, too, of the richest perfection, large and beautiful to look at, and possessing a rich and delicate flavor which delights and satisfies even the most fastidious. Our gardens are embellished with trees and plants from uttermost parts of the earth, and under the hand of the skillful and judicious planters, landscape effects are created which poets liken unto those in paradise." With greatly improved facilities and advantages too numerous to mention, the nurseryman of to-day propagates and sells thousands of trees where one was propagated and sold in the earlier days. The eastern nurserymen, though met with keen competition from their brethren at the West and South, display no timidity, no lack of energy, no disposition to diminish their efforts, but plant and sell more than ever. The recent financial stringency has not effected the nursery industry to the same degree that it has others, but the prevailing low prices and large supply on hand, render the outlook for the future doubtful, if not unpromising. Passing to the ornamental department, the speaker urged that nurserymen should give more attention to the growing of perfect samples of the best trees and shrubs, so as to stimulate the demand for stock. He then quoted examples of the many colors of bark on trees in mid-winter and the variety of beauty in foliage and flowers in the summer, and especially emphasized the necessity for intelligent selection and planting. The nurseryman's hopes and expectations "are always bright from the fact that it is in his power to create new fruits and flowers by hybridization and crossing, whenever he feels disposed to devote the time and labor to the undertaking. This great privilege is not limited to any particular person but is open to everyone, and it is somewhat strange that more do not engage in this interesting pursuit." In conclusion Mr. Barry said the eastern nurserymen were doing their utmost, with their ample resources, and great facilities, to propagate the largest amount of stock of the best quality, and that to all appearances the condition of business was much the same as in previous years in spite of the panic.

NURSERY INDUSTRY IN THE SOUTH.

In the absence of P. J. Berckmans, of Augusta, Ga., J. Van Lindley, of Pomona, N. C., was asked to speak on "The Nursery Industry in the South." He had seen the nursery business in his section from its infancy (over forty years ago), when his father thought he was doing a large business in selling ten thousand trees in a year, and the speaker presumed that he himself now handled as many trees in a year as his father did in all his lifetime. The South had, he was told, one of the largest nurseries, planted to fruit trees alone, in the world. Speaking of the recent great freeze, which had been so much talked of, he said it was not the freeze that was so remarkable, but the season when it came. February was unusually warm, apricots and peaches were in bloom in the latter part of the month. March came in warm as August usually is in New York, and remained so till the morning of the 26th of the month, when, about "sun-up," the thermometer fell from seventy degrees to twenty-six in twelve hours. Peaches and pears were frozen down and fruit could be peeled. Peach buds suffered, and 75 per cent. was killed clean. Peach seedlings were cut down, but they are now up again.

W. F. Heikes, of Huntsville, Ala., said that while the freeze was the worst he had experienced, yet the cherries, some varieties of plums, Bartlett pears and similar types, had not suffered. Nursery stock recovered very much better than was expected.

J. I. Newson, Nashville, Tenn., said that in his section they did suffer some from the freeze, and were thankful it was no worse. A few years ago the nursery interest in the South was almost nothing, but now, from the Atlantic ocean to the Rio Grande, and from the Ohio river to the Gulf of Mexico, the country is filled.

NURSERY INDUSTRY IN THE NORTH.

J. Cole Doughty, secretary of the Jewell Nursery Company, Lake City, Minn., said:

"When I reflect how little I know of the nursery business, I regret my hasty acceptance of your secretary's invitation to address you. A moment's reflection convinces me that I can say but little that will interest a representative body of nurserymen, many of whom have grown gray in the business.

"Many of you are conversant with some of the difficulties and obstacles we have to contend with in our extreme cold climate. The nursery business viewed from latitude 45, longitude 92½ is more like a dime museum than any other business I know of. It requires a daring investment of time and capital to begin with, and the public are sure to feel that the highly colored pictures on the outside are an exaggeration of the contents. Freaks are largely the stock in trade of the showman, while freaks of climate go to make up the common experience of a nurseryman in Minnesota. It is a case of 'now you see it and now you don't see it.' Now you are certain that you have met and solved

the last knotty problem and a peaceful calm steals o'er you like the gentle dews of evening on a sleeping lake, but the winter of your discontent is soon upon you and the awful realization of your failure forces you into ambush, and not until time softens the blow and the elixir of repose heals the cruel sting, do you come forth to renew the conflict, but come you will, for there is an inborn desire to meet and overcome all obstacles and from the bracing air and blue sky of Minnesota comes the strengthening energy that pulsates through every fibre and gives determination to triumph over disaster.

"The nursery industry in the North requires an element not necessary in more favored localities, for not only must the nurseryman know how to grow, but he must know what to grow, and what will best succeed with his customers. How to grow nursery stock in the North is a study full of exceptions to the general rule. Protection from drouth and protection from cold are familiar terms to him who is even partially successful and a variety of experiences greet him at every turn.

"It will not surprise me if in the near future we shall grow standard apples and pears, as we are now growing peaches by laying them down and covering up for winter. Some of the most interesting developments in fruit growing have been brought about by intelligent processes of protection, which have added very materially to the scope of nursery products for the North. Small fruits that were unprofitable to raise are now grown in abundance, and at a profit, and our attention is now running to other fields for conquest, and if we cannot have roses in that surfeit of profusion with which they grow in the South, where no effort is required, we can, with protection, bring our treasures through the severest winters without harm. We can also generate more enthusiasm over one fine bush in bloom than is known and experienced over a thousand that have been grown without effort.

"Cultivating, mulching and irrigation are important factors to our success and are the basis from which we must determine what protection is needed for the winter. A proper amount of moisture and at the right time are also necessary to success and I am inclined to think that many nurserymen in other localities could study the conservation of moisture in the soil to good advantage for where the best conditions of location and soil exist there is often a lack of moisture at just the time it is most needed.

"Another interesting feature of the nursery business of the North is the originating and developing of varieties of fruits and flowers that are most hardy and best adapted to the rigors of a dry cold climate and if it is not at all times as remunerative as our southern friends desire, it has an element of adventure for which northern and western men have a keen relish, the greatest ambition being to develop those kinds of fruits that can be successfully grown in the North. Some valuable and certain progress has been made in that direction. The experimenter, of course, will not reap the reward he deserves, but he will confer a lasting benefit upon others and will be entitled to the reward due the benefactor of his fellow men. Failure upon failure may be his experience. but when success does perch upon his banner, it is colored by the glorious tints of the brightest of sunny skies and tinged by the bloom wafted on the purest and freshest of air. Fruit in Minnesota is perhaps unexcelled for its beauty of coloring and richness of flavor, which always is an incentive to persevere, and so the business, if not always as remunerative as we could wish, is spiced with a rich element of satisfaction that may not always be found elsewhere.

"A few words in regard to our particular business. Our shipping season begins from April 1st to 5th, with shipments to other nurserymen. Our spring deliveries are generally made about April 15th in Illinois and Southern Iowa first, following northward as the season progresses, and usually ending in northern Minnesota, North Dakota, and Manitoba about May 10th to 15th, according to the season.

"In our earlier shipments we are compelled to use extra precautions to protect our stock against frost, using tight boxes, lined with paper and very little moisture, confining our packing principally to damp moss among the roots and nearly dry straw outside of that.

"There is a theory extant among nurserymen, that stock may be frozen without injury, if thawed out in the original packages. We have in some instances experienced very little loss where stock was frozen, but it has invariably been in the case of very tight boxes and very gradual exposure to heat. Goods when packed in air-tight boxes, may be thawed out in a cool, dark place, *if given plenty of time*, with a minimum of loss, but the cases must be packed full and tight, leaving no air spaces. With all this we have a strong prejudice against frozen stock under any circumstances.

"Our sales for the spring of '94 were a trifle less than for the spring of '93, though our mail orders and office business increased fully 25 per cent. The bulk of our business, is of course, a retail trade, as the increased cost of growing goods in our climate and latitude prevents our making prices to compete with southern and eastern growers at wholesale.

"I note a heavy demand for some of the iron-clad varieties of standard apple, the Duchess of Oldenburg, Wealthy, Hibernal, etc., as well as many of the hybrids or crab apples. We had also a heavy demand for native plum on plum, of the American types, such as the Weaver, De Soto, Forest Garden, etc.

"Our planting in the spring of '94 was a slight increase over that of '93, principally in the hardier varieties of standard apples, hybrids or crab apples, and plum on plum roots.

"We find trade somewhat influenced by the financial depression, but if the usual conditions obtain, we have reason to expect a fairly good business for fall of 1894.

"In conclusion, whatever failure comes to nurserymen in the North, we have a work to accomplish that cannot be set aside, and that is to see that every man in our part of the vineyard has a succession of fruits from the time strawberries ripen till the latest winter apples are harvested and if Coxey's army does not solve the labor problem, we shall endeavor to establish every unemployed man on a five-acre fruit farm in the center of each quarter section of land throughout the great Northwest."

NURSERY INDUSTRY IN THE WEST.

In the absence of Henry Augustine, of Normal, Ill., who was to have spoken on "The Nursery Industry in the West," President Pearsall spoke for that section. He said: "Fruits have brought best prices where planted most largely. We are apt to forget that up to this time the prices of fruits have been almost prohibitory to the common man. When the working man can afford to have fruits on his table as ordinarily as potatoes, then the consumption will extend wonderfully. Western people sometimes say that it is better to raise apples at 20 cents a bushel than wheat at 40 cents The trees at the West are free from disease, and with the exception of leaf roller and codlin moth, free from insects. I expect a full crop of most varieties of apples. In regard to stock, its value is determined by variety, etc., not by the locality of its production. It is a bugbear to talk about 'home grown stock.' Apple trees grown in Kansas will do just as well as those grown in New York, and eastern stock is just as good for the West as western stock. It is the same with vegetables and grains. We must grow things where we can grow them the best and cheapest. Eastern people cannot grow corn at eight cents a bushel and pay interest on land, while this has been done by me."

Professor L. H. Bailey, of Ithaca, N. Y., read a paper on "The Natural History of Synonyms." The question as to whether it is possible for the same variety to originate twice; or is every new seedling a distinct variety, was the gist of some sharp controversy in the horticultural world. The confusion attending the discussion of this question arose because there are two opposed views of what constitutes a variety, one contending that a variety is determined by its origin, while the other defines a variety by its own tangible attributes. Professor Bailey proceeded to distinguish the two positions, in order that just conclusions might be arrived at respecting the origin and uses of synonomous names.

SECOND DAY'S PROCEEDINGS.

Early in the forenoon of the second day of the convention the members were photographed for the frontispiece of THE NATIONAL NURSERYMAN.

Wing R. Smith of Syracuse, N. Y., read a paper on "Pear Culture," based on experience in Syracuse. The firm with which he is connected grows a high grade of standard pears. The first requisite was to have a good healthy stock. To be good, stocks should have proper size. a quarter of an inch and up in diameter; and should bg thrifty with good branched roots. The second requisite was soil adapted to the growth of pear trees, which should be put in proper condition for insuring a rapid, healthy and continuous growth of the trees. His firm had found a clay loam, with a stiff, clay subsoil, best suited to standard pears. It should be thoroughly underdrained, subsoiled, and pulverized, so as to allow the stocks to at once start to grow when planted. He explained a plan for underdraining the ground with tiling, and why he objected to open ditches. They take up too much land, have to be constantly cleaned and repaired, and they lose the very essential requirement, cross sub-soiling, by which is meant, sub-soiling and plowing across the drains, which not only loosens the soil, but draws the water to the ditches. He advocated liberal use of barnyard manure or proper commercial fertilizers, and thorough cultivation. He aimed to bud stocks as early as buds can be procured that are sufficiently ripened and mature; and the stock is then left untested until the following spring, except the keeping of the earth mellow by frequent cultivation. He did not approve of the leaving of a stub. From this on, there was little else to do than to keep the sprouts rubbed or cut off, and to stimutate a rapid growth by never ceasing and thorough cultivation. In the fall a furrow should be plowed up to the trees as protection against frost, and the following spring prune to whips, heading them back to desired height, which, with his firm, was three feet five inches from the ground. From time to time take off a few of the heavier limbs, and here the greatest caution and best judgment should be exercised. He did not advise winter pruning.

IMPORTED STOCKS.

Irving Rouse, of Rochester, N. Y., presented a paper entitled "Why are Foreign-Grown Shade and Evergreen Trees Sold so Largely by American Nurserymen" It is as follows:

"The question has been asked me, 'Why do nurserymen urge the sale and planting of foreign sorts of shade and evergreen trees and why is it so difficult to get native American sorts?' The discussion of this question is perhaps of less importance now than it was ten years ago, as the demand on the part of planters for native trees is, I believe, such as to compel most nurse-

ries to keep a certain amount of the more common native sorts. The general public, however, still plant far too largely of European sorts and too few of American varieties, and I believe the nurserymen are mainly responsible for this condition of things. We see English and Scotch elms, where that most perfect of street trees, the American elm should be planted; Norway maple in place of Sugar maple, European mountain ash in place of American; thousands of horse chestnuts and Spanish chestnuts, both comparatively worthless in fruit and wood, while our American sweet chestnut is neglected; English walnuts which succeed only in California and warmer parts of our country are found all over the North and East in almost every cross-road nursery, while not one concern in twenty grows our shellbark hickory, and the list might be indefinitely extended. With shrubs it is not quite so bad, but such native plants as the White Fringe—to my mind the very finest of flowering plants—is scarce, more scarce in our home nurseries than it is in Europe where it is apparently better appreciated. In evergreens until recently scarcely anything was planted but European sorts. Scotch and Austrian pine, Norway spruce, Irish Juniper and the like, and Norway spruce especially, seems to have the call, a tree that, so far as my experience goes, dies at the top and is worthless after twenty or twenty-five years. These trees have been planted to the exclusion of our native American sorts, such as the beautiful and stately White pine and graceful hemlock, the sequoias and Blue spruce. The sequoia or California big tree is common in almost every French or English nursery, while our average American nurseryman has never even seen a specimen.

"Years ago when the nursery business was in its infancy in this country, the men conducting the business were European by birth and education. Naturally they applied to their friends and acquaintances in Europe and to the nurseries long established there for their stock, and so was started in this country the cultivation and propagation of European sorts rather than American. There was also undoubtedly a much stronger demand at that time than there now is for foreign sorts. I may be mistaken, but I think that the public is now more ready to buy native sorts than nurserymen are to furnish them. The ease with which European sorts can be obtained and the small cost of importing induces the average nurseryman to plant year after year foreign sorts that should be superceded by American.

"Speaking from an extended experience in the importing business, I believe that the ratio of foreign sorts to American in stocks planted is more than 100 to one. This condition is certain to be remedied in time and I believe that the best opening offered in the nursery business to-day is the establishment of a seedling nursery, conducted on the lines of some of the larger French nurseries, for the purpose of supplying a full line of native American sorts in trees, shrubs and evergreens."

THE TARIFF DISCUSSION.

George A. Sweet, of Dansville, N. Y., read a paper entitled "Our Foreign Relations," which caused a lively discussion. He had just returned from Washington, and spoke as the result of some experience with the senate committee. He advocated absolute free trade in nursery stock between the United States and all foreign countries. The present rate is twenty per cent. ad valorem, and under the proposed senate bill it is ten per cent.

Mr. Sweet said he did not care to touch on the subject of the domestic trade, as it was affected by the foreign trade, and that simply meant the effect of the tariff on the nursery interest. Four years ago he would not have cared to have raised this question in such a convention, but it seemed that now they had reached a point where protectionists and free traders could meet on common ground, and had reached common conclusion, viz: that it would be better if nursery stock was placed on the free list. To-day it was possible to make comparisons. From 1862 to 1882 they were subjected to a twenty per cent. duty; from 1882 to 1890 nursery stock was placed on the free list; from 1890 to 1894 it was again subjected to a twenty per cent. duty, and now, in 1894, it is proposed to reduce that duty to ten per cent. A comparison of those epochs would show that from the time of the panic of 1873 to the revision of the tariff in 1882, when they were put on the free list, nursery products declined to a point where they were absolutely unremunerative and many large concerns had to go to the wall. After 1882, while on the free list, for a period of eight years, nursery products were in good demand at high prices, and more money was made during that period than in any other eight years the speaker had been in the business. From 1890, when the McKinley bill passed, nursery products had steadily declined, until to-day many articles were being offered at rates below the actual cost of production, so that the people who favored the restoration of the duty have lived to see their prophesies falsified, because the result has not been to decrease the plantage and increase the price, but has had exactly the opposite effect. So far as the protectionists were concerned their theory does not, rightly considered, enter into this question at all. Owing to climatic conditions and the multiplicity of leaf diseases, rust and mildews, it had become practically impossible successfully to grow seedlings in this country, the result being that they were compelled to pay a tariff tax upon articles which it is absolutely essential they must import in order to make their plantings. It was no more possible successfully to grow seedlings in a general way over the United States than it was to grow tea or coffee; therefore, so far

CONTINUED ON PAGE 77.

PRESIDENT J. H. HALE.

J. H. Hale, the new president of the American Association of Nurserymen, was born on the farm where he lives, in 1853. He and his brother were thrown on their own resources when quite young by the death of their father. They early began the culture of small fruits for market. Testing all the new varieties soon stimulated a demand for plants which led them into the nursery business in the early seventies, first in a local way and gradually into a business which extended throughout the country. They employ no agents, but advertise in the horticultural press and send out 75,000 to 100,000 catalogues annually. They ship plants directly upon orders to customers all over the world. They are very large growers of small fruit plants, perhaps the largest in the country. Last spring they sold over 5,000,000 strawberry plants. They do a moderate business in trees at South Glastonbury, where they have 125 acres in cultivation. They are also largely engaged in peach orcharding, with 25,000 trees in orchard there.



PRESIDENT J. H. HALE.

In 1890, Mr. Hale took entire charge for the eleventh census of the United States of the first special investigation of nurseries ever made in this country. A very thorough investigation was made. His assistants went through all the farm schedules of the United States census, taking out every nursery production, while he made supplementary investigations in every state in the Union, traveling over 50,000 miles in this work and visiting every nursery center.

Mr. Hale purchased, in 1890, the well-known "Edgworth" plantation, of 1,000 acres, in Fort Valley, Houston County, Ga., and organized the Hale Orchard and Nursery Company, of which he is president and general manager. He has there an orchard of 100,000 peach trees and a nursery where he annually propagates 200,000 peaches, 100,000 Japanese plums, large numbers of Oriental pears and one or two million Mariana plum stocks, entirely for the wholesale trade.

Mr. Hale has a family of four children, and, as he himself says, "plenty of bad habits and some good ones."

Among Growers and Dealers.

On the afternoon of the second day of the convention, several gentlemen accepted the invitation of Brown Brothers Company to visit their Canadian nursery. The drive from Suspension Bridge to Ridgeville was full of interest, running as it does through a beautiful section. The nearly two hundred and fifty acres of nursery stock, the property of the company, was found in fine condition, every block being visited by the party. It was a beautiful sight to look upon the even-growing blocks of stock, exhibiting a thriftiness and cleanliness which did one's eyes good. The party was entertained at the residence of Superintendent Charles Fisher, and at 9 o'clock the next morning the gentlemen were joined by E. Morris, of Fonthill, who, after another look over the Browns' place, conducted the party to his own nurseries. Here were seen acres and acres of as fine stock as ever lay out-of-doors, and it was a great treat. As dinner time approached Mr. Morris took the party to his stock yard, where were some beautiful and noble specimens of imported horse flesh. But Mr. Morris is not only an enthusiastic nurseryman and horse owner; he has a genial and hospitable side, which was unostentatiously conspicuous in the elegant dinner which he set before his guests, he occupying the head of the table, and his niece, Miss Williams, performing the lighter duties. This Canadian trip was one that will linger long in the memory of the participants.

Among those who visited Rochester, Geneva and Dansville nurseries after the convention, were President J. J. Harrison and TreasurerJ. H. Dayton of the Storrs & Harrison Company, Painesville, O.; Secretary J. Cole Doughty of the Jewell NurseryCompany, Lake City, Minn.; Harlan P. Kelsey, Kawana, N. C; W. B. Otwell, Carlinville, Ill.; W. T. Hood, Richmond, Va.; W. J. Peters, Troy, O.; E Albertson, Bridgeport, Ind.

The Nurserymen's Mutual Protective Association re-elected Hon. N. H. Albaugh of Tadmor, O., president, and George C. Seager of Rochester, N. Y., secretary, at its meeting at Niagara Falls.

Daniel D. Herr, of Lancaster, Pa., reports a largely increased trade for last spring.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., JULY, 1894.

THE ASSOCIATION MEETING.

The nineteenth annual meeting of the American Association of Nurserymen was one of the most interesting and profitable in the history of the organization. The attendance was large and the proceedings were characterized by enthusiasm. An excellent programme was provided by the secretary whose efforts to secure its fulfilment were well rewarded. President Pearsall in his address ably reviewed the events of the year and offered valuable advice on a variety of subjects. He touched upon the topics of greatest interest which have from time to time been referred to by this journal. He cautioned the members against overproduction, advocated the introduction of new varieties, deprecated unfair restrictive legislation, advocated free trade between the states, commended the work of the horticultural press in keeping the trade posted and creating a demand for stock and congratulated the members upon the results of a year characterized by great financial depression. The papers presented contained more than the usual amount of practical information.

The proceedings of the convention were enlivened by the presence of several of the many prominent, active, earnest men in the association. President Pearsall took a deep interest in the deliberations and was often heard with credit to himself and to the advantage of the members. His part in the tariff discussion, like that of Mr. Albaugh, Mr. Douglas, Mr. Barry and Mr. Chase was characterized by a firm conviction of his position and unbounded loyalty to American interests. Mr. Albaugh's experience in the legislature of Ohio, that nursery state of protective principles, as well as thirty-six years' experience in the growing and selling of trees, especially fitted him to take part in the discussion. Mr. Douglas, Mr. Barry, and Mr. Chase have had many years' experience with the effects of a tariff and a free list as applied to nursery stock. Mr. Morris, representing the largest nursery in Canada, declared the position of his government on the subject and Mr. Bowman's experience was of value. Altogether it was a most interesting symposium and it was thoroughly enjoyed by all. Such discussions are essential to a successful convention. The presentation of papers upon trade topics is always of interest, but a lively discussion by men ably qualified to participate in it creates an interest of a different nature—an active rather than a passive interest. Probably no one, not even the author of the paper which caused the free expression of opinion, foresaw the result. Mr. Sweet is well posted on the tariff question, but he found it necessary to summon all his resources when he had fairly crossed swords with all who entered the arena. So lively was the discussion at one point that a member of the association arose and objected to the vigorous assault on Mr. Sweet's position, declaring that it was not fair nor courteous. But Mr. Sweet assured the gentleman that the discussion which he himself had precipitated was perfectly proper. The speeches would have done credit to the United States senators themselves. The gentlemen proved that they had been thinking deeply on the subject for some time and that their opinions were well formed and decided. The debate is reported in detail in this issue. It showed not only that the tariff is not a question that divides on party lines, but also that, among nurserymen, the protective tariff men are largely in the majority.

A MISTAKEN VIEW.

It has recently come to our knowledge that some members of the trade have held the opinion that this journal was published in the interest solely of one individual, that it was of the nature of a nurseryman's catalogue, sent out under the guise of a periodical, to present in a sinister manner the wares of that individual. This information was a genuine surprise; but upon reflection it appeared that perhaps experience with such schemes and the lack for many years of a journal to represent the trade gave sufficient reason for such an opinion among those who had favored the journal with but a cursory glance It is well to possess the ability to penetrate the inwardness of subtile schemes which are intended to deceive, but that same shrewdness should enable one to judge promptly the merits of an honest undertaking. The fact that there are publications purporting to be trade journals but in reality mere advertising circulars for the firms they represent should not be a reason for including THE NATIONAL NURSERYMAN in that class.

That such an opinion as has been referred to should exist is proof of the necessity for the kind of instruction a

representative trade journal should impart. Owing to the lack heretofore of a nursery trade journal, it has been necessary to some degree, to cultivate a taste for trade literature. That such efforts on the part of the publishers of THE NATIONAL NURSERYMAN have not been without effect is proved by the fact that the very men who expressed the opinion that this journal was the organ of an individual, have during the last year repeatedly stated that they were much mistaken.

THE NATIONAL NURSERYMAN is published in the interests of the trade. It is unnecessary to say that to anyone who has given it more than a passing glance. It has had the endorsement of the leading nurserymen of the country from the start and its publishers will strive to merit that endorsement at all times.

THE OFFICIAL JOURNAL.

THE NATIONAL NURSERYMAN acknowledges the compliment paid it by the American Association of Nurserymen in making it the official journal of the association. We trust that the members will freely use its columns for the expression of opinion on the many topics which come up for discussion. The cordial manner in which the proposition to make this the official journal was received at Niagara Falls shows that its friends and supporters are in every state in the Union; and from Canada and Europe comes the same hearty commendation.

THAT was a graceful act on the part of the convention at Niagara Falls, to make up a purse for Mr. Bull, the originator of the Concord grape. It showed due appreciation of the benefits resulting from Mr. Bull's work. That, as well as the evident disposition among the majority to encourage the introduction of new varieties, was in line with our appeal last month, to protect the originator. The nurseryman owes much to the men who are successful in producing standard varieties that are new. Such men should not be in a condition of want.

A. L. WOOD, of Rochester, brought to the office of THE NATIONAL NURSERYMAN a few days ago several boxes of fine specimens of the Greenville strawberry. The variety cannot be surpassed. The flavor is pronounced and there is a richness which we have not found in any other strawberry.

WHILE popular opinion throughout the United States pronounces Bordeaux mixture the best insecticide, it is of interest to know that the French preparation, Schloesing insect destroyer, is gaining ground as almost a panacea for the ills that trees and plants are heir to. It is claimed that this preparation will radically destroy all insect life and cure all cryptogamic diseases.

THE AMERICAN ASSOCIATION — Continued.

as the tariff law is concerned these products ought to be treated in the same category; consequently the issue of protection was really not involved in this question, and the protectionists and free traders could stand on common ground and consistently ask congress to admit nursery products free of duty. In the next place, it was essential, in order to relieve the market from the glut of stock, to find some foreign outlet, if possible. The only available outlet must be across the Niagara river into Canada. Prior to 1890 nurserymen had a large trade in Canada, but on the passage of the McKinley act the Canadian government retaliated by placing specific duties on trees imported from the United States. Those duties ranged from ten per cent. ad valorem up to four cents per tree specific duty, or an average duty of twenty to thirty per cent. ad valorem, and on some grades reaching as high as 100 per cent. The result of this Canadian tariff was largely to diminish the exportation into that country, and that outlet being thus cut off, it has helped to glut the home market with an overstock that has either been sold at a loss or been consigned to the brush pile. Should congress place them upon the free list, as was done in the Wilson bill, there was every reason to believe that the Canadian government would reciprocate, and American nurserymen would regain the Canadian trade. If this could be accomplished it would have a considerable tendency towards putting the nursery industry on a healthy basis.

Regarding Mr. Sweet's statement that under the present tariff the purchaser paid the tariff, in addition to the cost of the stocks in France, Mr. Albaugh asked if it were not a fact that foreign stocks were cheaper the last four years than ever before, and if the growing of Mariana plum stocks in the United States had not lowered the price of foreign Myrobolan plum stocks, at least one-half. Mr. Sweet's answer was not considered decisive.

Mr. Morris, of Fonthill, Ont., said he wished to correct Mr. Sweet's statement that the present rate of duty on nursery stock in Canada was put on in a spirit of retaliation. "In Canada," said he, "the principal political question which has divided the parties has been high duties or low. The party favoring high duties, or as it is known there, the "National Policy," came into power about 17 years ago, and the aim was then, and has been since, to put sufficient duty on to protect all native industries. It is my opinion that Canada is ready to accept any reasonable proposition regarding reciprocity in the general products of the two countries."

Mr. Sweet, (to Thomas W. Bowman, Rochester, N. Y.)—"Was not the placing of duty upon nursery stock imported from the United States to Canada a retaliatory measure?"

Mr. Bowman.—"It was. At the first session of Parliament after the government of Sir John A. Mc-

Donald came into power, there was a duty placed upon nursery stock of all kinds. I cannot tell whether it was all ad valorem, or part that and part specific; but it was amended the next year following, I think, or soon after, placing a heavy specific duty upon many things, with a clause attached to the bill, stating that if the United States government admitted nursery stock free from Canada, the governor-general of Canada had the power to issue a proclamation to admit such stock into Canada without duty; but it appeared they were not very sincere in this matter, for the next meeting, or the next meeting but one, of our Congress after this clause was added to the statutes of Canada, the duty on nursery stock was abolished by the United States. Although the attention of the Canadian government was called to this matter at once, they did not take any action to remove the duty on nursery stock for some four or five years, and then they did not until very strong pressure was brought to bear upon them by our minister at Ottawa, and the duty was removed for a short until the McKinley bill placed a duty upon nursery stock coming into the United States, when the Canadian government at the very next session of Parliament, again placed a duty upon nursery stock coming into Canada, at a very high rate; on some things almost prohibitory. Therefore it is plain enough to be seen that it was a retalitory measure.''

Mr. Albaugh said that foreign nursery stocks were never so cheap as they have been since 1890; that Canada tariffs did not follow United States tariffs; that he had paid 20 per cent. tariff on stocks shipped to Canada, nearly twenty years ago; that he believed in a reasonable degree of protection upon all things that could be produced in this country; that free trade was a myth; that nearly every foreign country had a tariff more or less protective; that the American laborer was better paid than the laborer anywhere else; that he lived better and consumed more of the luxuries of life than the laborer in any other land; that thereby American markets were the best in the world, and that these markets thus made by our munificent system of government, should be protected for American producers and not be allowed to be overrun by the merchants and traders of foreign lands.

Howard A. Chase, of Philadelphia.—"Let us at least try to be consistent. If we are to have a revenue tax equivalent to a cent a pound on every pound of sugar that enters into the most remote and humble home in this broad land, let us not object to a paltry ten per cent. upon nursery stock and seedlings. I agree with Mr. Sweet that from a purely personal and selfish standpoint, it would probably be to our advantage to have seedlings, especially pear seedlings, on the free list; but if we are to have a tariff on revenue lines, let us be consistent and not advocate placing on the free list an article that we cannot successfully produce ourselver. On the other hand if we are to accept the theory of protection, and it be found practicable to place pear seedlings on the free list and maintain a protective duty on such nursery products as we can successfully grow in this country, we will be acting in a consistent manner. As you are all probably aware, under the tariff bill of 1883, all nursery products were on the free list, and as a natural result, every spring the surplus stock of Europe was dumped into our larger Atlantic coast cities, notably Boston, New York, Philadelphia, and Baltimore, and peddled out for whatever it would fetch. The damage and loss, direct and indirect, that resulted to the American nurserymen under the operation of that law, can never be calculated. The McKinley bill with its duty of twenty per cent. greatly reduced these importations, with the exception of roses. As the result of roses remaining on the free list, one of our largest retail general stores in Philadelphia sold the past spring, hundreds of thousands of dormant imported two-year-old bushes, which were retailed in connection with dry goods, four bushes, four colors, for four nickels—five cents apiece! Gentlemen: Do whatever you please as regards pear seedlings, but when it comes to general nursery products, no free list for me.''

William C. Barry, Rochester, N. Y.—"I am glad Mr. Chase has drawn attention to this part of the question. The discussion so far seems to have been in reference to seedlings which American nurserymen import largely, but it should be borne in mind that there are many nurserymen in this country who grow ornamental stock on an extensive scale, and whose business suffers greatly from the introduction of foreign goods. There are many rose growers on this side whose goods come into direct competition with those from abroad, and if no duty be imposed on the foreign goods, American rose growers will be forced to quit the business. This is only one illustration; when there was no duty foreign growers shipped into the various ports of New York, Boston, Baltimore and Philadelphia, large quantities of their surplus stock which was sold at auction, thus coming into direct competition with the goods of American growers. It is not difficult to see that such a condition of things would soon ruin the American trade, and I am therefore of the opinion that it would be wise to impose at least a duty of 40 or 50 per cent. upon the articles which can be grown in this country, and letting such stock as we cannot grow here come in free. The injurious effects of these ruinously low prices for foreign goods affects not only the nurserymen, but also all such men as have agents.''

President U. B. Pearsall closed the discussion saying that he had listened to the words of wisdom of veterans in the business, both pro and con, and hoped all would profit by it, but he could not agree with his friend Sweet in the proposition to remove the duties from all classes of trees and shrubs. It would strike a severe blow at the nursery

industry. It was reasonable and consistent to remove the duties from pear and quince stocks, as it had been demonstrated that these articles did not prove healthy when grown in this country, but it was not true of Mahaleb cherry stocks. They can be easily and successfully grown here, provided that good pits (which have not been purposely doctored so they would not germinate), could be obtained. Said he: "I can point you to as successful a Mahaleb cherry orchard and also as successful growers of Mahaleb stocks at Sarcoxie, Mo., as any place in the world. This firm would have produced an immense supply of seed and stocks the present season, but for the almost unprecedented freeze last March, and such disasters happen even more frequently in Europe than here. Certainly such an industry should be fostered and encouraged, and we would be untrue to our own interests if we failed to protect it. In the great West we can grow apple seedlings to perfection and we should have such a tariff as will reserve the American market to the American producer.

"As one who followed the flag from Bull Run to Appomatox, spending nearly five years of the cream of my life to save this government; as one who can never behold our flag without a painful reflection of the vast amount of blood and treasure which it has cost, I have listened to-day to gentlemen from Canada, undertaking to teach us lessons of political economy, and how strange it is that any portion of our people would take advice of a people whose interests are diametrically opposed to ours. I learned during the war never to do what my adversary desired. In commanding different posts throughout the South, whenever I instituted rules, or issued orders, which pleased the disloyal element, I invariably found that such orders were not conducive to the welfare of the Union cause. This was especially the case relative to passing parties or goods through the lines, and hence, when I found my administration was approved by the unqualified loyal element, it would soon be shown that I was right. The same principle follows in our intercourse with foreign countries, for we have no interests in common with them. Let us ascertain what they want and we can easily decide what we do not want, for it is easy to see what would contribute to their wealth and advancement must be taken from us, and vice versa, hence all the theories upon such questions must be subordinate to demonstrated facts. We all know that there can easily be produced in this country, to good advantage, all the fruit trees and shrubbery (with the few exceptions noted), that can possibly be marketed. Why then, in the name of common sense, should we fail to institute such a system of protection as will reserve our home market for home grown products? Here at a time when labor is seeking employment at niggardly wages, to open the gates to foreign products grown by pauper labor, would be little short of a crime against those seeking employment.

"As an American, I stand here to enter my solemn protest against Americans following the advice of foreign statesmen. I do not blame them for trying to induce us to favor their interests, but that is the very reason we should not follow their suggestions. In my own section in Southern Kansas, we have a little group of Canadians who came to us poor boys, and within a quarter of a century have accumulated more wealth than they ever could in their native land, and notwithstanding this, they are continually taunting us about how much better government Canada has than ours, and still these people, who are the beneficiaries of our country, will growl and grumble, when at the same time we could not drive them back to Canada with a pack of blood-hounds. This brings us face to face with the great immigration problem, the neglect of which is the true cause of our present depression and outburst of anarchy and discontent.

"A careful, unbiased study of this great question, will result in the conclusion that instead of having too *much* protection, we *have not enough.* Both safety to our institutions and charity for the great masses of unemployed, demand that we should do now, what should have been done long ago, viz: *Stop the flood of immigration into this country.* The demand of the hour is to put a *tariff* of say at least *$500 on every adult laborer, or in lieu thereof, stipulate that no adult person shall land here unless he or she brings at least $1,000 each.* Do this, my countrymen, and with some few changes in our tariff laws, our protective system will be complete. Do this, and we will soon expand our avenues of employment, so as to give constant work at lucrative wages to all in our land. Do this, and we will soon become Americans in fact, as well as in name. Do this, and the nursery interest will receive its full share of the great benefits.

"As one who has always placed fealty to the flag above life itself, I long to see this great needed change accomplished, for then, indeed, will we see this people make such rapid strides both morally, mentally and financially, as will gladden the heart of every patriot in the land. Then we will really see the markets reserved for American labor. We will then raise *American trees for American orchards, American roses for American homes, make American goods for American consumption, print American books for American children, hoist American flags over our American schoolhouses* and finally bringing our people out of the present condition of despondency to that of a great, happy, prosperous race (unpolluted by the present stream of corruption, ignorance and vice, which is daily rushing here), which would again make gigantic strides in every respect that pertains to good citizenship, a people who with one acclaim would daily rise singing our national anthem and retire singing the doxology. May God speed the day when these hopes can be realized."

NURSEYMEN'S KICKS.

Hon. N. H. Albaugh, president of the Albaugh Nursery Company, of Tadmor, O., enlivened the proceedings with a speech on "Nurserymen's Kicks," an abstract of which follows:

"When Saul of Tarsus made that famous journey from Jerusalem to Damascus, and experienced that wonderful spiritual sunstroke that blinded his natural orbs but opened his spiritual vision, he perceived a great light, and a voice spoke unto him saying that 'it was hard to kick against the goads.' The voice not only told the truth, but also branded Saul as the 'boss kicker' of his day, and since his time there have been kickers all down the line to the present moment. The preacher kicks if his orthodoxy is some other preacher's heterodoxy. The physician of allopathic predilections kicks at the little pellets of the homeopath. The lawyer kicks if the judge or jury leans toward justice, if justice rests with the other fellow. The politician kicks when the largest crowds rush to greet his opponent. United States senators kick when they fail to get their 'sugar,' and even men have been known to kick while being hung.

"So the world is full of kickers, in every phase and sphere of life; but of all the kickers, little or big, short or tall, good or bad, the nursery kicker 'takes the cake.' Not only has every nursery centre its ideal standard of tree, plant, or vine, but almost every nurseryman has a like standard himself, and these standards differ almost as widely as the day differs from the night. For instance, in New York the model nursery-grown peach tree must be 'short and stubby,' while in the Mississippi valley they must be 'tall as bean poles.' So, when one nurseryman, of one section, ships a car load of trees to a nurseryman of another section, it gives a magnificent opportunity for the chronic nursery kicker to get in his work. His most common language, in his stereotyped love letter to the shipper, is, 'Trees not first-class, in fact worthless. Can't use them. Here subject to your order.' And then he often slyly slips them upon the grounds to his best dealer, who packs them out with great satisfaction, and to the low musical chuckle of the kicker, while the shipper five hundred miles away, receiving his love missive, knows that his name is 'Dennis' for ever receiving a cent from the kicker, turns his face to the wall with a calm resignation and sings a few verses of the hymn beginning,

'Blest be the tie that binds.'

"The opportunities of the nursery kicker are great. His consignor is hundreds of miles away, busy on his own grounds; time flying on in an electric circle, no day to spare to investigate at the far away consignee's packing shed, so the poor consignor 'mutters a prayer or two,' and then goes on with the weary grind.

"There are crimes that stand nearly on a level with murder and rapine. There are sinners that equal Cain, and of these the chronic nursery kicker is 'chief among ten thousand," and the most hardened sinner of them all. But you ask, shall the nurseryman *never kick*. I will answer in the classic language of 'Pinafore,' '*hardly ever*.' A mild inquiry and request, couched in gentlemanly language, for a correction of errors, can not be classed as a kick, nor its author a 'kicker.' If I were asked by a young and rising nurseryman if under somewhat discouraging consignments he should enter a vigorous kick, in the language of the elder Weller, when asked by his young friend his advice on entering the state of matrimony, I should answer as he did with one word, 'dont.'

"A groceryman may kick on his consignment from the wholesale house of sugar, coffee, tea, and all the innumerable articles in his line, have the same returned to him, and neither party suffers much loss, except freight and time. The dry goods merchant is in the same category, and so hundreds of handlers of non-perishable goods, but not so the nurseryman. In legal parlance, with him, time and distance 'are the essence of the contract.' Better a thousand times suffer a little inconvenience in silence and try some other consignor next season than be marked 'kicks for a reduction.'

"Two divines were disputing as to the relative merits of their religious beliefs and associations, one contending that his belief would lead him in the future world in the company of such eminent and learned men as Goethe, Schiller, Victor Hugo, Washington, and Lincoln, whose companionship would certainly be very desirable through all eternity. 'Yes, that is true,' replied his adversary. 'I admit that such companionship would be elegant, but I think you would find the *climate* objectionable!' So with even the gray and silvery hair of my friend Willard before me, ripening for that country 'where all good tree men go,' I would say, don't run the risk of emigrating to any such objectionable climate by being classed as a chronic nursery kicker."

NURSERYMEN'S NOVELTIES.

E. Morden, of Niagara, Ont., read a paper on "Nurserymen's Novelties." He said: "I think it would have been better if we had known fewer novelties in the past. It is unfair to so arrange our enterprise that our customers have all the losses and we all the profits. All good fruits have once been novelties. But where one prize has been drawn the long suffering public has found hundreds of blanks. To sell unworthy novelties is especially wrong in the nursery trade, because there is not only the first outlay for them, but they encumber the ground for perhaps years, and only give a crop of disappointment and dissatisfaction. Only a small percentage of all novelties are worthy of general cultivation. The really valuable fruits are few. Here in this section (Southern Canada) we can grow the finest fruits. Why should we hanker after iron-clad novelties? Novelties of value are very scarce. When nurserymen offer novelties by the score, they make childish pretensions

Novelties should not be introduced until after they have proven their worth by thorough trial. Under the supervision of the stations there might be sub-stations conducted cheaply by men on their own land. Such a system exists in Canada. Catalogues are often very misleading. The greatest offenders are found among some of our largest nurseries. This ought not to be. It hurts the majority, which consists of honest nurserymen."

Mr. Morden offered a resolution that the introduction of insufficiently-tested novelties, especially in large lots and putting them in catalogues should be discouraged.

Mr. Albaugh and President Pearsall spoke strongly against this resolution. They advocated the encouragement of seekers after new novelties.

J. H. Hale thought Messrs. Albaugh and Pearsall did not fully understand Mr. Morden's position. As Mr. Hale understood it, the idea was not to discourage seekers after new fruits but to prevent, if possible, the cataloguing of varieties which have not been fully tested. "We should search out the good things and prove them first," said he.

The motion of Mr. Albaugh that the resolution be laid upon the table was carried.

AN OFFICIAL JOURNAL.

Before adjournment of the first day's session S. D. Willard of Geneva, obtained the floor and with characteristic enthusiasm referred to the endorsement of THE NATIONAL NURSERYMAN by the president in his address, and moved that THE NATIONAL NURSERYMAN be declared the official journal of the association. "Our trade has long needed such a journal," said he. "THE NATIONAL NURSERYMAN admirably supplies the want. It is the handsomest trade journal issued. We are proud of it and we want it for the official journal of this association."

C. H. Perkins, of Newark, N. Y.—"I second that motion."

George W. Campbell, of Delaware, O.—"I heartily endorse the motion. THE NATIONAL NURSERYMAN is one of the best publications that come to my desk. I have read it with much interest and it has really been of great benefit to me. I feel that it is much needed in the trade. I hope all nurserymen will not fail to support it."

Hon. N. H. Albaugh, Tadmor, O.—"Mr. President, I would like to ask if, in doing this, the association will in any way be called upon to devote any of the funds in its treasury to the journal?"

Mr. Willard.—"No, sir; not at all; not at all."

Mr. Albaugh.—"Very well. I did not suppose it would, but I merely raised the question. I heartily endorse the motion. The journal is in every way a credit to the trade."

Mr. Freeman of the Farmers' Nursery Co., Tadmor, O.—"We can't do without it."

Others said, "We want it," "It is our trade journal." The motion was adopted unanimously.

OTHER PAPERS.

Other papers were: "Forestry," Robert Douglas, Waukegan, Ill.; "New Fruits Also Cause of Low Prices for Nursery Stock," Charles A. Green, Rochester, N. Y.; "The Rocky Mountains — Will They be Fruitful," S. M. Emery, Bozeman, Mont.; "New Hardy Apples for the Northwest," H. W. Ash, West Union, Ia.

Professor Bailey reported concerning the World's Horticultural Society as outlined in the June issue of THE NATIONAL NURSERYMAN.

The *American Florist* says of one of the most prominent nurserymen of the country who was at the convention: "Frederick G. Withoft of Dayton, Ohio, is one of the proprietors of the Dayton *Daily Press*, vice-president of the Albaugh Nursery and Orchard Company, Tadmor, O., with 500 acres; president of the Ohio Land Fruit Company, Fort Valley, Ga., 1,820 acres; treasurer of the Albaugh-Georgia Fruit Company, Fort Valley, Ga., 1,172 acres; treasurer of the Kentucky River Fruit Company, Gratz, Ky., 250 acres; director of Woodstock Fruit Company, Gratz, Ky., 300 acres; director of Oakridge Fruit Company, Kathleen, Ga., 600 acres; director of Tivola Fruit Company, Tivola, Ga., 1,536 acres; director of Moss Lake Fruit Company, Fort Valley, Ga., 600 acres.

Subscribe for THE NATIONAL NURSERYMAN.

R. H. BLAIR & CO., Office Northwest Corner 11th and Walnut Sts., Kansas City, Mo.

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail,

STRICTLY NO. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM, ...

Roses, Ornamental and Shade Trees. Prices low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

WE ARE BUYERS OF

PEACH, PEAR, PLUM AND CHERRY IN CAR LOTS.

NEED ALSO GENERAL LINE OF

Ornamentals · and · Small · Fruits.

Have Apple Stocks to Offer. **H. C. GRAVES & SONS,**

COUNCIL BLUFFS, IOWA.

THE MOST COMPLETE ILLUSTRATED DESCRIPTIVE CATALOGUE FOR NURSERYMEN

ever published, now ready for delivery. Printed on elegant paper from new plates. Two years labor devoted to preparing the copy. Over 128 pages. Smaller catalogue of the various departments for those who wish. Sample copy free to prospective buyers. **JOHN J. PINNEY,**

Horticultural Printer, Sturgeon Bay, Wis.

300,000 PEACH TREES,

50 Varieties.

BUDS NOW READY.

WRITE AND GET MY PRICES. **J. G. Harrison & Sons.**

BERLIN NURSERIES, BERLIN, MD.

When writing to advertisers mention The National Nurseryman.

APPLE SEEDLINGS.

(Wholesale Trade Only.)

We grew and sold **4,800,000** during the past season. We belong to no combine and will gladly quote prices on any amount at any time. We have also fine stock of

APPLE TREES, 1 and 2 years.
KEIFFER PEARS, 1 and 2 years.
CHERRY, 1 and 2 years.
PLUM, 1 year.

— AND —

French Pear Seedlings.

PRICES ON APPLICATION.

F. W. Watson & Company,

TOPEKA, KAN.

PEACH TREES.

THESE have been a leading feature in our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varieties known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BROS. & THOMAS,

Maple Avenue Nurseries, West Chester, Pa.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ. 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, **Chester Co., Pa.**

When writing to advertisers mention The National Nurseryman.

WOODLAWN NURSERIES,

ROCHESTER, N. Y.

ALLEN L. WOOD, PROP.

Wholesale Only. **No Agents.**

Grower of

SMALL FRUIT PLANTS.

We offer for the Fall of '94 and Spring of '95, the largest and most complete collection in the United States of high grade small Fruit Plants for Nurserymen and Dealers. Special attention is directed to the following Raspberries in large quantities:

50,000 Cuthberts, Transplants.
30,000 Carolina, "
75,000 Golden Queen, "

also Brandywine, Brinckle Orange, Herstine, Marlboro, Rancocas, Thompson's Early Prolific in transplants. Also an immense lot Doolittle, Gregg, Johnson's Sweet, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's Colossal and Tyler, of extra heavy tips for Fall.

Blackberries, 100,000 Snyder, root cuttings.

Also a large lot of Agawam, Ancient Briton, Early Harvest, Erie, Eldorado, Kittatinny, Lawton, Lucretia Dewberry, Minnewaska, Taylor, Wachusett, Wilson Early and Wilson Jr.

Currants, 50,000 Fay's Pro., 2 yrs.
25,000 White Grape, 2 yrs, extra fine plants.

Also 400,000 of extra fine 1 year plants of the following: Blk. Naples, Cherry, Blk. Champion, Red Dutch, Fay's Pro., La Versailles, North Star, Lee's Pro and White Grape.

Gooseberries, 70,000 Downing, 2 yrs.,
20,000 Houghton, 2 yrs., of extra fine plants.

Also Golden Pro. (Pearl New,) Red Jacket, Smith's Imp., Triumph and Chautauqua.

Strawberries, Eight Acres.

Millions of Plants for early Fall trade. Headquarters for the great Greenville Strawberry. Testimonials from California to the Atlantic, from Maine to Texas. The best Strawberry that has been sent out since the Wilson Albany. Send your orders to me and get them True to Name. I also have all of the other leading kinds.

Asparagus, 2 year Roots.

Millions of the following varieties: Conover's Colossal, Palmetto and Elmira.

Rhubarb, 100,000 Myatt and Victoria,

Extra fine plants. Also large stock 2 yrs. Grape Vines of all the leading kinds.

☞ For miscellaneous stock look at wholesale catalogue for Fall, ready August 1st. Free.

STOCK WANTED.

We need a car load of Dwarf and Standard Pear, also a lot of Ornamental stock, Forest and Apple tree seedlings. . . .

Having a large surplus of Apple, Grape Vines, Cherry, Small fruits and other stock, we would like to effect an exchange for such stock as we need. .

PROPOSITIONS TO FURNISH ALL OR PART WILL BE CONSIDERED.

The Hart Pioneer Nurseries,

. . . . . **FORT SCOTT, KANS.**

BUY THE BEST.

WHITNEY'S IMPROVED

Western Tree Digger.

Manufactured by

N. A. WHITNEY,

Send for Prices. FRANKLIN GROVE, LEE CO., ILL.

When writing to advertisers mention The National Nurseryman.



We are the largest nursery printers in this section and our assortment of cuts comprises nearly everything in both the old and new varieties. Do not hold a penny so close to your eyes that you cannot see a dollar. Do not use some old, worn-out cuts for your illustrations, that look as if they were made when Adam was a boy, but get something new and up to date, so that your agents can tell the difference between an Industry Gooseberry and an Idaho Pear. The steady increase in our nursery printing is very gratifying to us and proves that first-class printing and prompt service is appreciated by the leading nurserymen in this section. If you have strayed away from headquarters we will be glad to welcome you back and renew old acquaintance. Our prices are just as low as is consistent with good work and we do not follow the plan which a great many printers (?) do, of doing one job for less than cost and then charging three times what the next one is worth. Orders by mail will receive our careful attention. The National Nurseryman is from our press and we handle everything in the line of Nursery Printing. Let us hear from you.

NURSERY WORK OUR SPECIALTY.

The Gelhaar, Fleming & Fuller Printing Company, Incorporated,

COOK OPERA HOUSE BUILDING. ROCHESTER, N. Y.

FRENCH FRUIT TREE STOCKS.

Immense Stock Large Assortment.

LENAULT HUET,

Nurseryman at Ussy, Calvados, France,

offers Fruit and Forest Trees, Evergreens, Shrubs, Roses and a general list of Nursery Stocks of finest quality and high grade, with branches at Angers and Orleans. I am enabled to supply any wants of the trade at the most moderate prices. Before purchasing elsewhere send me an estimate of your wants and learn my prices.

Special care given to grading and packing. Satisfaction guaranteed

Address all orders and enquiries to

C. H. JOOSTEN,

3 Coenties Slip, New York.

WANTED at the proper season, prices and catalogues of Conifer Seeds.

Knox Nurseries,

ESTABLISHED IN 1851.

1,500,000 APPLE TREES, 1, 2 AND 3 YRS. OLD.

Akin Red, Mam. B. Twig and Ark. Black, in large quantities. Also a large stock of Cherry trees and Evergreens. Our trees are as fine as can be grown, and they ripen up earlier than farther West. . . . . .

You will save money by sending us a list of your wants. . . . . .

H. M. SIMPSON CO.,

VINCENNES, IND.

. SNOWHILL NURSERIES. .

Having One Million fine Peach Seedlings growing on our own grounds, from strictly healthy seed,

Would be pleased to have parties wishing early special varieties budded and grown for them to be delivered Fall 1895 and Spring 1896, correspond with us in reference to same by August 1st, 1894. Address,

W. M. PETERS SONS,

Wesley P. O, Worcester Co., Maryland.

75,000 JAPAN PLUMS,

all sizes from $\frac{11}{16}$ and up 5-6 ft, down to mailing size. Abundance (Botan), Berckman's Kelsey, Maru, Burbank, Bailey, Normand, Babcock, Chebot, Georgeson, Uchi Beni, Yosibe, Ogon, Satsuma, Yellow Japan, Prunus Simoni and Pissardi. New varieties: Willard and Sokio.

20,000 Crosby, Champion, Ellyson and Lorentz, hardy Peaches; Lincoln, Lincoln Coreless, Jap. Gol. Russet and Seneca Pears, 1 yr.; fine stock.

30,000 1 yr. Kelffers.

Heavy stock Strawberries, leading sorts at prices as low as good plants can be properly handled. Not grown on "Jersey Sand Banks." We don't have them here. Specialties: TIMBRELL, GREENVILLE, PRINCESS and MEEKS.

Plenty of Carolina Poplar, Silver Maple, Catalpa and Box Elder.

200,000 Asparagus Roots with long tails, grown on light soil. Conover's, Barrs, Palmetto and Elmira.

WRITE FOR PRICES.

We are NOT the "Largest Nursery in the U. S.," but what there is of us is "pretty nice."

THE ROGERS NURSERY CO,,

ISAAC C. ROGERS, Manager. Moorestown, N. J.

Stark Bros.' Nurseries & Orchards Co.,

LOUISIANA, MO. and ROCKPORT, ILL.

All *fresh* land and the very finest nursery soil. A very large general stock. Fruit trees by the million. Staples, also many new leaders and favorites.

APPLE.—Akin, Ark. Black, Babbitt, Jefferies, Kinnaird, Nero, Paragon (Mam. Black Twig), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR.—Bessimianka, Garber, Idaho, Koonce, Krull, Jap. Gol. Russet, etc.

PLUM.—Abundance, Burbank, Clyman, Frecstone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Ironclad, Mo. Apricot, Orient (Japan), Strawberry Japan, World Beater, etc.

PEACH.—Gold Dust, Northern Ap't, Sneed, etc.

APRICOTS.—Noonday and Sunrise, new and **large** Russians.

CHERRY.—Abbesse, Bl'k Tart'n Improved, Cal. Advance, Ida, Montmorency Ord., Ostheimer, Suda Hardy, etc.

CRAB.—Florence, Gibb, Richland Sweet, etc.

GRAPES, CURRANTS, BLACKBERRY, RASPBERRY (Red and Black), ORNAMENTALS, SHADE TREES, ROSES, SHRUBS.

Capital Nurseries,

PETERS & SKINNER, Props.

NORTH TOPEKA, KAN.

We will have for fall of '94,

APPLE TREES, 2 and 3 years; KEIFFER PEARS, 1 and 2 years; CHERRY, PEACH AND PLUM TREES.

SEEDLINGS.

APPLE, OSAGE ORANGE, BLACK LOCUST, HONEY LOCUST, RUSSIAN MULBERRY.

PETERS & SKINNER,

Correspondence Solicited. North Topeka, Kan.

Kansas Apple Trees,

In Car Lots. None Better.

Ben Davis, Jonathan, Mo. Pippin, Gano, etc., etc. Also Standard and Dwarf Pear, Cherry, Plum and Peach. Largest stock of

CROSBY AND BOKARD PEACHES

in the West. These have stood 22 and 28 degrees below zero and fruited. Buds of all leading sorts for sale. A large stock of the celebrated KANSAS RASPBERRY plants. You will do well to let us hear from you.

A. C. GRIESA & BROS., Props.

Mt. Hope Nurseries, Established 1869. LAWRENCE, KANS.

APPLE SEEDLINGS.

1,000 to Car-Load Lots.

APPLE, PEAR, PLUM AND CHERRY TREES,

Evergreens and Small Fruits, Pear Seedlings.

WHOLESALE PRICE LIST IN AUGUST.

Special Quotations Now. W. A. WATSON & CO.,

Normal, Ill.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

W. T. HOOD & CO,

OLD DOMINION NURSERIES.

350 Acres under Cultivation. Richmond, Va.

FOR FALL 1894-SPRING 1895.

A very large stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs, Japan Pear Seedlings.

CELLAR, PACKING SHEDS AND BEST FACILITIES FOR HANDLING STOCK PROMPTLY.

COLOMBE BROTHERS,

USSY, (Calvados), FRANCE.

FALL OF 1894 AND SPRING OF 1895.

Mahaleb Cherry, 1 year, 4 to 8 m—m. Common Pear, 1 year, 4 to 6 m—m.
" " 1 " 2½ to 4 m—m. " " 1 " 3 to 4 m—m,

Other sizes of Mahaleb, Myrobolan, Pear, Apple, Quince, etc., at lowest prices. Also full assortment of Ornamentals.

LARGE, FINE STOCK THIS SEASON. CAREFUL GRADING. SUPERIOR PACKING.

ORDER EARLY.
Write and get my prices.

FRED. W. KELSEY,
. . . Sole U. S. Agent. 145 Broadway, New York.

GEYER BROS.,

ROCHESTER, N. Y.

APPLES, PEARS, PLUMS, PEACHES, CHERRIES, RASPBERRIES. ROSES, &c.

STOCK AT LOWEST WHOLESALE PRICES.

CORRESPONDENCE SOLICITED.

GREENVILLE STRAWBERRY,
EL DORADO BLACKBERRY

AND

DOWNING'S WINTER MAIDEN BLUSH APPLE,

Grown and for sale at their

ORIGINAL HOME.

For prices, plates, etc. write to E. M. BUECHLY,
Greenville, Ohio

We Have It: Precipitated Sulphur
You Want It: Schloesing with Nicotine.

Insect Destroyer and Anticryptogamic Powder.

Radically destroys Caterpillar, Larva, Vine Fretters, Aphis and other Parasites of Agriculture, Trees, Vines and Vegetables growing. It rids Cabbage of the Caterpillar of the Pieride, Potatoes of the Doryphora, and cures Tomatoes, Peas, Lettuces, Cabbages, etc., of the Peronospora. It cures the Vine of the Oidium, Mildew, Rots, Anthracnose and other Cryptogamic diseases, destroying at the same time Insects infesting it, such as Pyrales, Altises, Attelabes, Erimose and Snails. It cleans Fruit Trees of Lanigerous Vine Fretters, of Hermes and the White Caterpillar, also Lucern of the Negril. It will keep away Ants, Grasshoppers, Locusts and Coleopterea. It protects the Vine from Grey Worms, and cures Plants of Chlorose and stimulates vegetation.

Mixing this compound with Manure will destroy Worms, and mixed with seeds, *protects same against attacks of Larva and Insects of all kinds.*

"*This is the most powerful and best Insecticide ever offered to the public.*"

Write us for prices, we want your orders, address all correspondence to

BERKHAN & OTGEN, 39-41 Cortlandt Street, New York,

Sole Agents for United States.

Levavasseur & Sons Nurseries,

USSY (Calvados) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

BEST GRADING QUALITY AND PACKING.

Send your List of Wants for Special Prices to

BERKHAN & OTGEN,

39 and 41 Cortland Street, = = New York.

Sole Agents for the United States and Canada.

Orleans Nurseries Co.,

ORLEANS, FRANCE.

Growers of fine Fruit Stocks, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application. . . . .

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - New York.

HEADQUARTERS FOR

RAFFIA.

PRICES ON APPLICATION.

THOMAS MEEHAN & SONS, = = Germantown, Pa.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

Geneva Nurseries.

YOUNGERS & CO., Props.
. . GENEVA, NEB . .

WE HAVE A LARGE SURPLUS OF

• SHADE TREES. •

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

Syracuse Nurseries and "Lakeside" Stock Farm.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Plums.

A very fine line of

Ornamental Trees and Shrubs,

suitable for **LAWNS** and **PARKS**, and a very large exceptionally choice list of

Roses.

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

—OUR—

Live Stock Department

Is replete with **HORSES** and **CATTLE** of all ages and both sexes, of the following breeds.

STANDARD BRED,
FRENCH AND AMERICAN COACH.
CLEVELAND BAY,
HACKNEY,
CLYDESDALE,
PERCHERON.

and Driving, Coach, or Carriage Horses, single or in pairs.

— ALSO —

Holstein Friesian Cattle

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

SMITHS & POWELL CO., Syracuse, N. Y.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

. . BRIGHTON, N. Y. . .

I have to offer for Fall, 1894 and Spring, 1895, the following strictly first-class stock:

75,000 Apple Trees,	**25,000 Standard Pears,**
10,000 Dwarf Pears,	**15,000 Plum Trees,**
15,000 Cherry Trees,	**10,000 Peach Trees.**

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

I Offer for Fall 1894

Clematis.—Strong plants. Own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh: Crispa; Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.
Honeysuckle.—Hall's Japan, Monthly Fragrant.
Ampelopsis Veitchii. American Ivy.
Japan Snowball.—Strong, fine plants.
Roses, H. P's and Mosses.—Strong plants, own roots and budded.
Tea Roses.—Fine plants, 4 inch pots.
Tree Roses.—Elegant plants. Low price.
Oak-leaf Mt. Ash.—Elegant trees. Low price.
Weeping Mt. Ash.—Fine heads.
Cut-leaf Birch.—8 feet, perfect trees.
Purple Birch.—4 feet, **true purpurea.**
Young's Weeping Birch.—5 feet stems.
Lilac, Weeping Pendula.—5 feet, not budded on lilac.
Hydrangea P. G.—A fine lot of strong plants.
Flowering and Foliage Shrubs.—Fine assortment.
Paeonies.—A grand collection.
Paeonies, Tree.—Nice plants in quantity.
Gooseberries.—In variety; 2 year Plant.
Blackberries.—Strong, nicely trimmed to one cane.
Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry, North Star.
Grape Vines.—A complete assortment.
Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

Baltimore and Richmond Nurseries.

Peach Pits. . . . .

We offer for immediate shipment a very superior and well selected lot of PEACH PITS, both Smock and Promiscuous, all of crop of 1893, sound and in splendid condition, and offer as follows, payment Fall 1894.

Smock and Promiscuous. .

We would urge securing at least a portion of what you will need for this season, and believe you will obtain better results from early bedding.

Pits of this year's crop will be scarce and high.

We deliver at railroad depot in this city free of charge.

We are wholesale growers of general nursery stock and invite correspondence.

Japan Pear Seedlings. . .

For Fall 1894. Write us later for prices.

Franklin Davis Nursery Co.,

BALTIMORE, MD.

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . . HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WE are still in the market with our **Dry Baled Moss,** and at prices to correspond with the hard times. We wish to exchange for Fall '94, Pears, Plums and Cherries. Also have a good stock of Dwarf Juneberry and High Bush Cranberry.

Z. K. JEWETT & CO., Sparta, Wis.

ESTABLISHED 1852.

Phoenix Nursery Co.,

600 Acres. . .
13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS— Wholesale and Retail.

Correspondenee solieited and promptly answered.
Send list of wants for priees. Salesmen wanted.

P. O. BOX 1215. . . . BLOOMINGTON, ILL.

John Waterer & Sons, Lt'd,

NURSERYMEN,

BAGSHOT, ENGLAND.

RHODODENDRONS AND OTHER HARDY EVERGREENS.

Correspondence solicited.

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON.

Write me for easy terms and prices. TOMAH, WIS.

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,
ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR
UNITED STATES AND CANADA.

ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK.

Gilbert Costich, Rochester, N. Y.

SURPLUS FOR SPRING, 1894.

Apple, Cherry, Dwarf Pear and Plum,
Evergreens, Ornamental Trees, Etc.

Nurserymen's Stock Book.

COMPLETE AND PRACTICAL.

Size, 16x21 inches.—58 pages. Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.
ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.



GREENVILLE and CROSBY.

REPORTS FOR 1891.

"One of the very best of 150 varieties fruited at Missouri Experimental Station. Crescent, the only one equaling it in productiveness, while but two excelled it in size."—JOHN W. CLARK, Horticulturist.

"A new berry of many excellent points, very large, good quality, and equally valuable for market and home."—GEO. C. BUTZ, Penn. Experimental Station.

REPORTS FOR 1892.

"Most productive of twenty-five selected varieties."—PENN. EXPERIMENTAL STATION.

"In your list of varieties Greenville merits first place, either for home use or market."—MISSOURI EXPERIMENTAL STATION.

Comparisons were obtained between Greenville, Warfield, Haverland and Bubach, from Six States, embracing the Experimental Stations of Ohio, Indiana, New York, Missouri and Minnesota, W. S. Scoville, of Wisconsin, and the Secretary of the Ohio State Horticultural Society.

By grading of above authorities on "Scale of Ten," Greenville leads for home use and market, as it received the highest average.

REPORTS FOR 1893.

By the average of Experimental Reports this year ***"Greenville leads for productiveness, market, home use and general purpose.*** See summary below:

This Summary is Based on Reports of the Ten State Experimental Stations named opposite.	Productiveness.	Market, Near.	Market, Distant.	Home Use.	General Purpose.
GREENVILLE,	1	1	2	1	1
WARFIELD,	4	6	1	6	5
HAVERLAND,	2	2	4	4	2
BUBACH,	6	4	5	5	7
CRESCENT,	3	7	7	8	3
CUMBERLAND,	8	3	6	2	8
ENHANCE,	5	8	8	7	6
GANDY,	7	5	3	3	4

OHIO. **DELAWARE.**
INDIANA. **MASSACHUSETTS.**
PENNSYLVANIA. **MISSOURI.**
SOUTH CAROLINA. **MICHIGAN.**
OREGON. **MINNESOTA.**

The "Scale of Ten" is based on a score of ten points, and the variety obtaining the highest grade is given first place. The figure 1 represents first place; 2, second place, etc.

No Stations sent comparisons on this list, for 1893, except the ones named above.

At the Annual Convention of the American Association of Nurserymen, held at Niagara Falls, June 6-7, 1894. The Committee on Exhibits class "Greenville" as being of ***large size, very good quality, moderately firm, and valuable for market, home use or general purpose.***

CROSBY Still leads for "Hardiness and Reliability of Crops."

TWELVE YEARS WITHOUT A FAILURE.

In a letter received June 1st, 1894, J. H. Hale says the fruit this year on Crosby will have to be thinned to obtain the best fruit; whereas on ALL other varieties in his orchards, only a few scattering peaches can be found, and that were all his trees of the Crosby, it would make him ***Fifteen Thousand Dollars*** more this year.

BUDS FOR SALE.

Sixteen page Catalogue, 1894, on Crosby and Greenville, sent free on application, also sample lithograph plates of Greenville. Write for prices and list of wants.

Resp.,

WILL EXCHANGE FOR STOCK NEEDED.

The Farmers Nursery Co.,

TADMOR, OHIO.

NURSERIES:
Rochester, N. Y.
Ridgeville, Ont.

OFFICES:
Rochester, N. Y.
Chicago, Ill.
Toronto, Ont.
Portland, Ore.

Brown Brothers Company,

CONTINENTAL NURSERIES,

. . . . . ROCHESTER, N. Y.



WE WILL soon have our June counts completed and be in shape to figure closely on trade requirements—What stock we find ourselves short, we will, as far as possible, obtain in exchange for our surplus—Send us your long and short lists. Our surplus will consist largely of Standard and Dwarf Pears, Cherries and Ornamental stock and our shortages principally in Apples and small fruits.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

August, 1894.

Painesville Nurseries.

FRUIT AND ORNAMENTAL TREES—SMALL FRUITS AND GRAPE VINES—SHRUBS AND ROSES—PLANTS AND BULBS.

Largest assortment of new and old varieties; unequaled facilities for prompt and accurate filling of all orders; immense storage cellars and packing houses.

WEEPING DECIDUOUS TREES.

Splendid stock; Tea's Weeping Mulberry, Mountain Ash, Camperdown Elm, Kilmarnock, New American and Wisconsin Weeping Willows, Cornus Pendula, Young's Birch, Whiteleaf Linden, etc.

Full line Upright Deciduous and Evergreen Ornamental Trees, Poplars, Maples, Tulips, Flowering Thorns, Magnolias, Elms, Catalpas, Purple-leaved Beech, Norway Spruce, Pyramidal Arbor Vitæ, etc.



CAMPERDOWN ELM.



Large stock Blackberries, extra fine plants from root cuttings, including a large lot of Ancient Briton, the best hardy market variety. All the leading kinds of Currants, Gooseberries, Raspberries, Strawberries, etc., in large supply.

Fine stock Mulberries and Nut trees, American Chestnuts from 1 year seedlings to 6 to 8 feet, at low rates.

Handsome blocks of Standard and Dwarf Pears, Plums, Cherries and Peaches.

ROSES.

12 acres of strong field-grown plants. No better stock in the U. S.

Bulbs for Fall trade direct from the best Holland and French growers. Highest quality at low rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. **1000 ACRES.** **28 GREENHOUSES.**

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

A FEW OF OUR SPECIALTIES FOR FALL 1894.

GOOSEBERRIES.

Supurb plants of DOWNING, INDUSTRY and COLUMBUS.

CURRANTS.

Fine Plants of CHERRY, FAY'S, VERSAILLAISE, VICTORIA and WHITE GRAPE.

HARDY ROSES.

Without doubt the finest collection in America; strong plants, budded and on own roots, for October delivery.

HORSE CHESTNUTS, AMERICAN CHESTNUTS, CAROLINA POPLARS.

Handsome and well grown trees.

Send for our prices on the above, also on all kinds of general Nursery Stock.

ELLWANGER & BARRY, Mt. Hope Nurseries,

ROCHESTER, N. Y.

"The most complete nurseries on the American Continent."

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

KAWANA, MITCHELL CO., N. C.

(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

STANDARD AND DWARF PEAR,

APPLE, PLUM, CHERRY, RUSSIAN APRICOTS, CUT-LEAVED WEEPING BIRCH,

And Low Budded Roses on Manetta Stock.

Prices Low and Stock Good.

Special Prices on Car Lots.

JAY WOOD,

KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

NEWARK, WAYNE CO., N. Y.

GROWERS OF

Choice Specialties for Nurserymen & Dealers.

ROSES—Hybrid Perpetuals, Mosses and Climbers; strong two year old plants on own roots; much superior to imported stock as they are strong, acclimated and true to name. Budded plants of those kinds which can not be grown on own roots.

CLEMATIS.—The largest stock in this country. Over **twenty-five varieties**; extra strong, well-rooted plants.

HONEYSUCKLES.—An extra large and fine stock of Hall's Japan; also Monthly Fragrant, Scarlet Trumpet, Red Tartarian, etc.

HYDRANGEAS.—Paniculata (2½ to 3 ft.) Otaksa, fine strong plants.

JAPAN SNOWBALLS.—Extra large, strong plants.

LILACS.—A large stock; strong plants; good assortment.

CHINESE PURPLE WISTARIAS. AMPELOPSIS VEITCHII.

PAEONIAS.—Large undivided tubers; the finest varieties obtainable in France or Italy.

EVERGREENS.—Austrian Pine, Norway Spruce, American Arbor Vitae, etc. All liberally graded, healthy and of good color.

ORNAMENTAL TREES.—Cut-leaf Birch, Kilmarnock Willows, Tea's Weeping Mulberry, Double Red Flowering Horse-Chestnut, Catalpas, Norway Maples, Oak-Leaf Mountain Ash, etc.

CURRANTS.—Both tree and bush-form; a full assortment and large stock of extra strong plants.

GRAPE VINES.—A good assortment.

FRUIT TREES.—A large stock; extra fine blocks of Apples, Plums, Quinces, Standard and Dwarf Pears.

Write for our new Trade List just out. Send us your Want and Surplus Lists.

☞HOW IS THIS? 20,000 Roses without a single second-class plant.

Jackson & Perkins, Newark, N. Y.:

GENTLEMEN—We were well satisfied with the character and grade of the roses which you shipped us this past spring. *Of the 20,000 plants we were not obliged to reject any.*

Very truly yours, R. G. CHASE & CO., Geneva, N. Y.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing.*

Send for Price-list and Circulars.

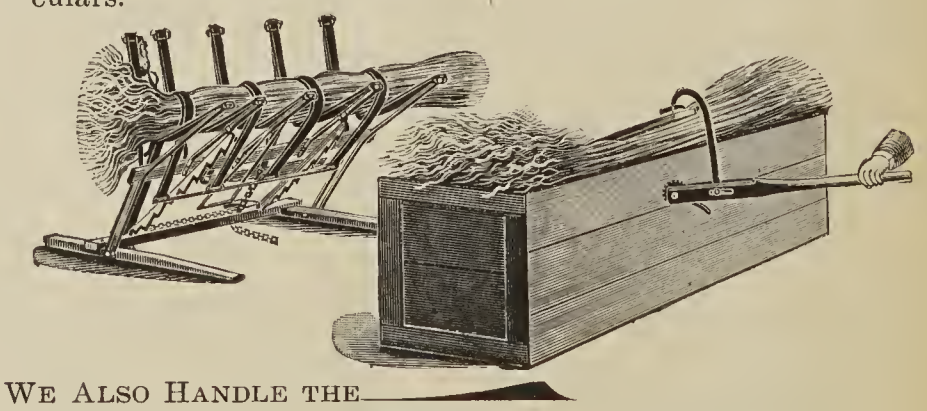
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp. *

It is *simple* to use as a *cant hook.* Can be adjusted by rolling ratchet so that rib will come *exactly* to place. ✵



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Balers, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

When writing to advertisers mention The National Nurseryman.

THE BEST ROSES,

Azaleas, Rhododendrons, Clematis, Etc., are supplied by the

BOSKOOP HOLLAND NURSERY ASSOCIATION.

For catalogues and prices address, **C. H. Joosten,**

3 Coenties Slip, New York.

C. F. McNAIR & CO.,

DANSVILLE, N. Y.

A large stock of young Apple, Standard and Dwarf Pear, Plum, Cherry, Peach, etc., for Fall '94 and Spring '95.

BUDS FURNISHED IN LARGE ASSORTMENTS AT LOW RATES.

Write for Prices, &c.

Correspondence Solicited.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

Stake Labels FOR NURSERYMEN.

Made of Maple, which experience has shown to be the most durable of all woods for the purpose.

HEAVY.

15	**inch;**	**1 1-2**	**x**	**5-16**	**inch.**
18	**"**	**1 1-2**	**x**	**1-2**	**"**
21	**"**	**1 3-4**	**x**	**3-4**	**"**
24	**"**	**2**	**x**	**3-4**	**"**
27	**"**	**2 1-2**	**x**	**7-8**	**"**
30	**"**	**3**	**x**	**7-8**	**"**

PRICES GIVEN ON APPLICATION.

Correspondence Solicited. **Samples Free.**

I take pleasure in offering to you my new Stake Labels, which are superior to all others made. Their superiority consists in quality of stock, neatness of form, and smoothness of finish. I offer my goods with confidence that they cannot be excelled, and should be pleased to receive your orders.

F. G. HEXAMER,

14 to 18 Lorimer Street, Brooklyn, N. Y.

WAKE UP!

If you want to secure the best prices it is time you were placing your order. **Prices will advance.** We are prepared to offer to the trade in **car load** lots an extra fine stock of **Apple, Cherry, Peach, Plum and Pear, (Kelffer especially.)** Also a general assortment of Evergreens, Ornamentals, Small Fruits, etc., etc.

Knight's Improved Currant, the most productive known.

SEEDLINGS, Apple, Mariana Plum Stock, Imported Pear, Mahaleb and Myroholan Stock.

SPADES.

The best Spade for the money ever offered; try them and be convinced. You cannot afford to be without them. **20 dozen sold last year.** Ask W. F. Heikes, Huntsville, Ala.; Geo. Peters & Co., Troy, O.; L. G. Bragg, Kalamazoo, Mich; Hoover & Gaines, Dayton, O.; and others what they think of them. (See circular.)

Correspondence and Personal Inspection Courted.

ALBERTSON & HOBBS,

Bridgeport, Marion Co., - - - - Indiana.

Baltimore and Richmond Nurseries

Offer for Fall '94 and Spring '95 large stock of the following:

Apple, Peaches, Plum (Japan and others), **Apricots, Nectarines, 1-Year Standard Pear** (heavy on Kieffer, Garber and Clapp's Favorite), **Grape, Asparagus, Strawberries, Osage Orange, Shade Trees, Evergreens, Shrubs, Etc., Etc.**

Well-Graded Stock! **Prompt Shipment!**

SATISFACTION GUARANTEED.

Special attention to growing Peach Trees of which we have the usual quantity. We are prepared to give prices to suit the times.

Franklin Davis Nursery Co.,

Baltimore, Md.

1838. **56 Years. 300 Acres.** **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifoliate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES,

WILLIAM PARRY, PARRY, N. J.

ESTABLISHED FIFTY-TWO YEARS.

Brighton Central Nurseries.

In the June issue of this Journal I told those who were intending to purchase Nursery Stock for their Fall trade to defer ordering until they saw our unparalleled offers in the July issue of this Journal. But for good and sufficient reasons that will benefit our customers in the near future, I have decided to further postpone the issuing of any Price List until August first. But, in the meantime, if you are in the market for special bargains, in car-load lots for early and late Fall shipments of any of the following stock which I name, it will pay you to write me. . . . . .

Plums, Standard and Dwarf Pears, Cherries,

Quinces, Standard Apples,

Weeping Cut Birch, and Currants,

Out of blocks that were never dug from.

I am also a heavy grower of Ornamental Stock, Shrubs, Roses, Nut Trees, Weeping Deciduous Trees that I should be pleased to price you on application. . . . . .

J. FRANK NORRIS,

BRIGHTON, N. Y.



THREE YEAR APPLE TREE.



THREE YEAR PEACH TREE.

HORTICULTURE IN COLORADO.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

U.S. DEPARTMENT OF AGRICULTURE RECEIVED DIVISION OF STATISTICS

VOL. II. ROCHESTER, N. Y., AUGUST, 1894. NO. 7.

A PROMISING FIELD.

From time to time this journal has called attention to the wonderful progress in horticulture made in Colorado. That state is a promising field for the nurseryman. The success in growing fruit of all kinds there has led to a general agitation of the subject. Capitalists have already secured large tracts of land for the purpose of planting them to orchards of various kinds. Climate and soil appear to be especially adapted to the growth of fruit, with the aid of irrigation where needed.

In its issue of June *The Horticulturist*, published quarterly at Grand Junction, Colo., says: "During the three months since the appearance of our first number, the envious fates have visited the orchards of California with a killing frost, have sent the blizzard and cyclone to disenchant the horticulturists of the middle and northern states, while in the South unexpected cold waves and terrific winds have rounded out a season of disaster unparalleled in the horticultural history of the country. It is vain to dwell upon our immunity from these and kindred evils or to dilate upon the weather report for this region, which has been religiously kept for the last ten years; the facts and results can be learned by all. We are not puffed up with pride, but calmly point to the record. To-day, as we write, the orchardists are engaged in the pleasant toil of thinning the superfluous fruit from thousands of young trees that could not withstand the weight its maturity would bring, and in glancing over the results achieved in the last three months we find as incidents of our progress and omens of future advancement that a steady stream of land buyers has been all that time invading this valley with horticultural designs; that over three hundred tracts of fruit land in size from five to one hundred and sixty acres have changed hands and passed into the possession of owners who have commenced to improve them; we note an increase in the number of pumping plants and the extension and enlargement of canals for irrigation purposes."

On the opposite page are presented two cuts illustrating Colorado horticulture. The first is that of a three-year-old apple tree in the orchard of J. R. Penniston, White Water, Mesa County. The second is that of a three-year-old peach tree at Grand Junction. They speak for themselves.

PEACH YELLOWS IN NURSERY STOCK.

A recent bulletin of the United States Department of Agriculture gives the following conclusions regarding peach yellows in nursery stock:

When the disease appears in young trees, and particularly in a region previously free from yellows, there is good reason for suspecting the nursery, it having been established by repeated experiments that the disease may remain dormant for some time in buds cut from affected trees and afterwards appear in the trees grown from such buds. The bud from which this shoot originated was cut in July from a very robust, thrifty watershoot on a healthy-looking branch of an affected tree. Nothing could exceed the vigor and beauty of this watershoot, and yet its buds contained the virus of the disease, which late the same season induced many of the winter buds of the daughter shoots to grow as here shown, although the original buds were set into healthy and vigorous seedlings, which had tops of their own. Of course all of these buds would have remained dormant until the following spring if the shoot had been derived from a healthy bud. Just how long the disease may remain in nursery trees without showing symptoms is unknown. In badly affected regions, where the likelihood of getting diseased buds is greatest, it is not uncommon to find affected trees in the nursery rows the following season, and experience and experiment leave no room for doubt that others showing no symptoms will develop them afterwards when set in orchards. The disease is also readily transmissible to healthy stocks, and can be made to finally destroy all parts of a healthy tree by the insertion of a diseased bud. The disease first appears in that part of the stock next to the inserted bud and subsequently in remoter parts. How soon the stock becomes affected depends in great measure on the character of the inserted bud. If this be taken from a plainly diseased shoot the symptoms appear in the stock sooner than if the bud is taken from such a vigorous shoot as that mentioned above. In either case the progress of the disease is slow. So far as yet known this transmission of the disease from bud to stock can take place only when there is a union of tissues; mere contact, even when close and prolonged, not transmitting the disease. Under favorable conditions such a seedling lived nearly five years after the insertion of the diseased bud, but never made much growth.

That yellows is also transmitted in some other way must be apparent to anyone who has studied the disease at all carefully. In badly affected districts the disease makes a clean sweep, and it is impossible to believe that all or even a majority of these trees brought the disease with them from the nursery. The well-established fact that trees with the soundest constitution readily take the disease, proves that in such cases the cause of the disease must exist in the

locality. Now if the disease is not induced in such trees by unfavorable local conditions of soil and climate, both of which explanations seem to have been ruled out by observation and experiment, then the only reasonable supposition is that they contract the disease from neighboring trees already subject to it. This inference rests on the fact that diseased trees are known to be full of a virus readily communicated to others trees by budding, and upon a great number of observations on the behavior of the disease in many badly affected localities.

By some the transmission of the disease has been attributed to the pruning knife, by others to diseased pollen. All that is definitely known is that the disease is communicable by bud inoculation ; that trees with the soundest constitutions are subject to it ; and that it behaves like an infectious disease, its first scattered appearance in a locality being followed after a longer or shorter interval by the occurrence of cases in many orchards, and this stage by the rapid destruction of the orchards.

As was pointed out some years ago, the chief defects of the Michigan law are, "(1) the inadequate compensation given to the commissioners, not enough to be certain of commanding the services of well-qualified men ; (2) the want of a general superintendent who shall see that records are kept and be responsible for the enforcement of the law in all parts of the state. Both of these defects are remedied in the Connecticut law, and the work of combating the disease seems to have started off in that state with a vigor and thoroughness that is commendable, 283,782 trees having been inspected and 26,647 condemned in 1893.

The results of the rooting-out process obtained in other states than Michigan are less striking, either because the laws have not been inforced very generally or because they have been in operation only a short time.

Some have held that the trouble originates exclusively in the nursery, and that the renewal of the orchards with trees having a "healthy constitution" would soon put an end to the ravages of this disease. Time, however, has shown that neither untainted buds nor sound stock afford any considerable protection. This is true even when an earlier fall of the leaves and ripening of the wood is secured by working the peach upon plum or apricot stocks. In one of the Department experiments buds were taken in a region free from yellows, were worked upon well-rooted Marianna plum cuttings, and after a year's growth were set out in localities much subject to yellows. Most of these trees grew well for two or three years, but then began to die, some with symptoms of yellows and others from an improper union between stock and root. There could have been no constitutional taint in these trees, because the parent trees were kept under observation four years, during which time they remained free from disease, as did also the plums from which the cuttings were made, and all other peach trees in that vicinity.

SOME NEW SMALL FRUITS.

Albertson & Hobbs of Bridgeport, Ind., sent to this office recently some very fine samples of a new red currant which has proved remarkably prolific on their grounds. It closely resembles the Victoria. It has a pleasant flavor ; the seeds are small and few. Its heavy bearing qualities make it a most profitable currant.

Ellwanger & Barry exhibited samples of Fay and Cherry currants which approach perfection very closely. There is but little difference between these kinds. Beautiful samples of the Industry gooseberry and of the Columbus, a native sort equally prolific, were shown. This firm has two new blackberries, the Eureka, as large and productive as the Gregg, but ten days earlier ; and the Champion, similar to the Eureka and with the added quality that the berries of each bunch ripen at the same time, so that in harvesting the bunch may be stripped with one motion.

George W. Campbell of Delaware, O., has arranged with George S. Josselyn of Fredonia, for the propagation of Mr. Campbell's new grape, Campbell's Early, a black grape said to be earlier, larger, firmer with smaller seeds than the Concord or Worden. There are no plants yet for sale. It promises well.

Secretary Doughty of the Jewell Nursery Co., Lake City, Minn., sends samples of the new currant North Star. The samples show that it is a fine, large, red currant of excellent flavor. It is a rapid grower and a prolific bearer, and it promises to become one of the leading varieties. It is being introduced with much success by the Jewell company.

John Charlton, of this city, brought to this office, a few days ago, some fine samples of the Triumph gooseberry which he says is nearly if not the same as the Columbus. This is the sixth season of the Triumph and the third of the Columbus. The latter was introduced by Ellwanger & Barry. Mr. Charlton also exhibited the Keepsake, a white gooseberry very popular in England. This is its second season in this country. In growth Mr. Charlton considers it as strong if not stronger than the Industry. It is much like that variety except in color. The fruit is nearly as large and it is very prolific. The Golden Prolific was also shown by Mr. Charlton. The fruit is yellow when ripe. It is a heavy cropper and of good quality.

The *Grape Belt* says: Louis Roesch had a specimen of his Chautauqua gooseberry on exhibition. The specimen shown was about one foot long and contained over 100 large, luscious berries, some nearly an inch in diameter.

Wales M. Nye & Bro., of Pittsford, N. Y., sent us, a few days ago, a box of cherries which they said are seedlings. The samples are remarkably fine cherries. They are black, of large size. The flavor is excellent. It is a sweet cherry, of very firm flesh and small pit. It is certainly a promising seedling.

Among Growers and Dealers.

The Tipton Nursery Co., Little Rock, Ark., is closing up its business.

Vice-President Albaugh writes: "Am well pleased with your full and accurate account of the proceedings of the the nurserymen's convention at Niagara Falls."

J. Austin Shaw, of New York city, has secured the agency for America of the Royal Nurseries of Belgium, Louis Van Houtte, proprietor. He will continue his retail florist business.

The barn and contents, including twelve mules, of the Alabama Nursery Company, at Huntsville, Ala., were burned recently. The company is composed of the Chase brothers who went there from Rochester several years ago.

The spring plant of the Oklahoma City Nursery Co., Oklahoma, included 275,000 apple grafts, 20,000 cherries, 40,000 peach, 12,000 plum, 150,000 grape cuttings, six acres of apple seedlings and five acres of small fruits and miscellaneous stock.

The Delta, Colo., Orchard Company has been incorporated with secretary of state. The company is composed of Herman O. Baer, A. C. Butler and Justine Goodhue and the capital stock is $5,000 which is calculated to plant a good-sized orchard. Mr. Goodhue is a nurseryman of Utah and is quite taken with the fruit possibilities of Delta county.

On June 15th Schuette & Czarnowski succeeded S. M. Bayles of the South St. Louis Nurseries. Mr. Bayles retires after having been in the business thirty-five years. The senior member of the new firm has been with Mr. Bayles thirteen years, ten years of which time he was in the office. The junior member has been Mr. Bayles' foreman fifteen years.

Gartenflora, one of the leading horticultural publications of Germany says of the exhibit of Fred. W. Kelsey, of New York, at the World's Fair: Mr. Kelsey exhibited a magnificent set of conifers and rhododendrons; an exhibit which had the admiration of all spectators. The plants were placed under a tent on "Wooded Island" and surpassed all that has ever been seen in this line in the United States. There were about one hundred different kinds.

Frederick W. Kelsey of New York City, is chairman of the public park committee of the Orange, N. J., Board of Trade, and a member of the public park commission recently appointed by Judge Depue of New Jersey. Mr. Kelsey is an enthusiastic promoter of public park systems. The Newark *Daily Advertiser* says: "Frederick W. Kelsey, the father of this later movement for public parks in Essex County, is a successful business man of liberal ideas and public spirit, thoroughly posted on the public park question and a good organizer, with a faculty of arousing enthusiasm in others."

F. S. Stannard, Ottawa, Kans., has been adjusting business affairs in Nebraska.

W. P. Stark, Louisiana, Mo., met a number of capitalists and fruit buyers in Chicago early in July.

Edward W. Sheahan, for 15 years foreman of Ellwanger & Barry's nurseries, died on June 17th, aged 41 years.

W. F. Heikes, Huntsville, Ala., visited the Louisiana, Mo., and Rockport, Ill., nurseries of Stark Bros. last month.

A. Willis, of Ottawa, Kans., called upon nurserymen in Rochester, Dansville and other Western New York points last month.

Nelson Bogue of Batavia, N. Y., is a member of the legislative committee of the New York State Association of Agricultural Societies.

Edward C. Morris, secretary of Brown Brothers Company, who has charge of the Portland, Ore., office of that company, visited Rochester last month.

Parker Earle, president of the American Horticultural Association, Chicago, is making a tour through Michigan and other states with a view to purchase orchard crops.

The Madison Nursery Co., at Madison, Wis., has been incorporated with a capital stock of $10,000. The incorparators are Chas. Nelson, J. A. Tormey and B. M. Bruce.

William J. Johnson, of Colorado Springs, has purchased Coburn's nursery plant in Montrose county, Colorado, and expects to do quite a tree business on the western slope.

The exhibit of the Greenville strawberry at the Niagara Falls convention was by E. W. Buechley of Greenville, O., instead of The Farmers' Nursery Co., as stated in our last issue. Mr. Buechley is at the home of the famous strawberry.

Ex-President U. B. Pearsall, of the American Association of Nurserymen, writes: "We think the convention number of THE NATIONAL NURSERYMAN reflects great credit upon its publishers. We assure you of our hearty best wishes in the future as in the past."

Charles E. Hart of Rochester, N. Y., who introduced eastern fruit trees in California taking his nursery stock from Rochester, died at his home in this city on June 17th, aged 77 years. He was a forty-niner in California, and afterward was a large oil operator in Pennsylvania.

Wm. Cutter & Son, of Junction City, Kans., have increased their nursery plant by 80,000 apple root grafts, 10,000 each of plum, peach, cherry and pear, and 30,000 each of seedlings for fall budding. They have 75,000 one-year-old apple trees for fall and spring trade, and 50,000 each of plum, pear and cherry, with 20,000 grape cuttings.

MONROE MATTERS.

MONROE, Mich., July 13.—Leading nurserymen of this place state that all kinds of young stock are doing well. There was a good catch on everything set out last spring and there have not been any disturbing causes to interfere with growth. As an illustration of heavy vegetation Greening Bros. have a block of 100,000 pear buds of 1893 that stand four feet high already.

C. W. Carman, well-known in nursery offices in New York state, and since the last two years with the firm of I. E. Ilgenfritz & Sons of this place, started a nursery of his own on June 13th. The inauguration ceremonies were performed at Jonesville by the Rev. R. D. Brooke and the articles of incorporation were furnished by the county clerk. Miss Lizzie Dingfelder, late operator for the W. U. T. Co., will be the home manager.

There is a surplus of standard pears, dwarf pears and cherries at this point, but they are selling fast.

The agents of the leading European houses who grow stocks for the American trade have visited this place and our nurserymen have given their orders for imported stock. They are planting more pears than usual in spite of the high price of the roots.

The firm of Greening Bros. have their new catalogue in press and it will be out in about two weeks. It will have a handsome lithograph cover, twelve half-tone engravings, five colored inserts and an abundance of cuts, which will make it one of the finest catalogues published. Firms desiring to exchange are requested to mail theirs to Greening Bros., who will make acknowledgment by mailing their own in return.

Miss Esther Bordeau, long associated with Greening Bros. as corresponding secretary, has just returned from a two weeks' recreative trip to Niagara Falls and Rochester. She took occasion at the same time to visit friends in the craft.

Budding is in full progress at the various nurseries in and around Monroe, and some good speed records have been developed, says the *Monroe Commercial*. Last Monday four experts in Greening Bros. nurseries inserted 11,000 pear buds, or an average of 2,800, in ten hours' work. The highest score was made by John Schneider, who put in 3,200 buds. As he is a young man not yet of age it is quite creditable for him to win the prize.

George Peters, of the firm of George Peters & Co., Troy, Ohio, was in town July 20th. He was on big business bent and he also *tried* to catch some fish in Plum Creek Bay.

The firm of I. E. Ilgenfritz & Sons have lately disposed of a part of their land to the F. & P. M. R. R., the consideration being $10,000. It is supposed that this road is making preparations to extend its line to Toledo.

There is a large amount of Cuthbert raspberries raised here and growers are shipping carloads of the fruit to Detroit, Toledo and western points. The railroad strike has caused slow delivery in some places and consequent losses, as the fruit arrived mouldy.

Greening Bros. are about to issue a 22 x 28 lithograph show card, representing their buildings and grounds. The work is being done by a Buffalo firm, and the key-plate is very creditable. The issue will comprise 8,000 copies and all nurserymen are invited to write for a copy.

Budding is progressing nicely. As this is an old nursery point there are plenty of hands here skilled in that kind of work, and most of them are employed. The weather is favorable and a good catch is expected.

ARZENA.

BUSINESS IN MISSOURI AND ILLINOIS.

In Northeastern Missouri and Northwestern Illinois the nursery business is based on horticulture. Giving heed to the consensus of opinion as manifested in the recent utterances of state and county societies, the tendency to grow better stock at an advanced price is very noticeable. In apple, Ben Davis, Akin, Babbitt, Jefferis, Rainbow, Paragon, Shackleford, York Imperial, etc., are getting the preference in all sales made in 37 states and territories. Notwithstanding the unfavorable indications from spring freezes, peach is having a good sale. Eastern nurseries are not operating as extensively in western states as in previous years. Continuing "hard times" and labor troubles are the reasons given. This makes a better business for western firms. Those who can offer stock on long time at a fair rate of interest. or who have orchards on the share-crop plan, are having the biggest harvest. A great deal of business along these lines is being done. Planters should have no cause to complain this fall or next spring about grade. There never was a better prospect for fine grown, well matured trees. But it will take much credit, considerable backbone, a vast amount of vigorous personal attention to successfully place it in the hands of customers this fall. Nurserymen who generally purchase more than they raise are buying very sparingly. In some cases they are taking "options" and very small ones.

THE OUTLOOK AT DANSVILLE.

Dansville, July 10.—Trees in Dansville are looking fine for this season's digging. In fact I never knew them to have such rangy top growth and be so free from all kinds of disease and insect foes. In plum trees we are especially favored. In European varieties there are particularly fine two-year-olds. Ornamentals are also looking well. Dansville this fall will have stock of all kinds which she will be proud to send out. * * *

HON. N. H. ALBAUGH.

Hon. N. H. Albaugh, president of the Albaugh Nursery and Orchard Co., Tadmor, O., and vice-president of the American Association of Nurserymen, was born in Ohio, in 1834, and is therefore 60 years old. His boyhood was spent on the farm. He began teaching school at 18 years of age, and taught very successfully for ten years or more. Marrying just before the war, he left his little family and went into the Union army, carrying a musket, and aided, under Grant to repel Lee in Virginia and the East. He was county school examiner for twelve years in his county. He is the author of the present magnificent school law of Ohio for the country districts, which establishes supervision and high schools in the rural sections. He was elected in 1885 to represent his county in the state legislature; was made chairman of the public works or canal committee; was re-elected in 1887, and was by acclamation chosen as one of its presiding officers; he was one of the republican presidential electors for Ohio in 1892. He has often presided over county, district, congressional and other conventions.



HON. N. H. ALBAUGH.

Mr. Albaugh began the nursery business at Tadmor, O., in 1858, and has continued in the business successfully, at the same place, to this time. In 1888, the business having grown to large proportions it was incorporated under the title of the Albaugh Nursery and Orchard Co., with a capital stock of $100,000, taken by over thirty prominent capitalists of Dayton, O., and vicinity, with Mr. Albaugh, who was elected its president, and still holds the same position. This company employs its own salesmen on a salary, guarantees its varieties to the purchaser, and does its retail business on a different plan than any other nursery in the United States.

Mr. Albaugh is also an extensive orchardist. In the winter of 1889-'90, he, with about thirty other Ohioans, made a trip over Georgia, and noting some very fertile table lands in Houston County, Ga., invested. A few months later the Albaugh-Georgia Fruit Co. was formed and incorporated, purchasing 1,172 of the best land near Fort Valley, Ga., and in the fall of 1890, 70,000 peach trees and 1,000 pear trees were planted thereon. A year later Mr. Hale of Connecticut followed and bought a farm of 800 acres near the Albaugh-Georgia plantation. Since the first purchase as above, Mr. Albaugh and others have formed seven other fruit companies and bought 8,000 acres of land in the same county, and planted orchards thereon, until at this time, they are the largest orchards in the United States, or even the world, comprising at this date 550,000 peach trees, 11,000 Keiffer pear trees, 10,000 Burbank plum trees, and 30,000 grape vines. A large proportion of these trees are just coming into full bearing. He also has a large orchard in Kentucky of over 50,000 peach trees.

Mr. Albaugh is a portly man, of the blond type, a jovial, social fellow, full of wit and repartee, and is accounted a good talker on his feet in the meetings of the American Association of Nurserymen. He was president of the association in 1881, at Dayton, O.; again at Atlanta, in 1892; and was elected vice-president at its session at Niagara Falls. He is president of the Nurserymen's Mutual Protective Association. His business integrity has never been called in question. He is prominent in lodge and church circles, and makes friends wherever he goes.

A new grape plague has appeared in Ohio, known scientifically as fidia viticidia Walsh. The bark is eaten from the grape roots, sometimes partially, but in many cases almost wholly, by numbers of small white grubs, as many as sixty-five having been found in the ground about a single vine. These grubs produce a small brown beetle — not the rose bug — a little over a quarter of an inch in length and covered with very short whitish hairs. The beetle feeds upon the foliage of the grape, emerging from the ground in June, and probably feeding until August or September. This beetle has long been known to eat the leaves of the grape in Kentucky, Southern Illinois and Missouri, but up to the present time nothing has been known of the habits of the grubs. Spraying with paris green, one ounce to twelve gallons of water destroys the beetles. Bi-sulphide of carbon placed in the ground about the roots of the vines, three ounces each, will kill the grubs.

P. C. Reynolds, of Rochester, is preparing a biography of the late Patrick Barry for private circulation.

L. O. Howard has been made entomologist for the U. S. Department of Agriculture, succeeding Dr. C. V. Riley, retired.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., AUGUST, 1894.

ORCHARDS AND NURSERIES IN DANGER.

Some horticulturists think that the San Jose scale, which recently appeared at Charlottesville, Va., and other points in the Southeast, will not at all affect the orchards of the North. We think, however, there is still danger owing to the peculiarities of this disease. If this pest will destroy thousands of trees in Eastern Washington and Oregon, where the winters are as severe as those known in New England, it is very apt to attack our own orchards, and all the more so, from the fact that year after year the amount of fruit shipped in California, Oregon and Washington is constantly increasing, and this disease can be transmitted on fruit as easily as on trees, and in fact more readily, as the fruit is stored in homes and warehouses, the packages containing them handled carelessly and thrown out into door-yards and from these the disease can easily be communicated to one or two trees. After it has once gained a foot-hold it will be almost impossible to get rid of it.

If the Pacific coast states hold to their quarantine laws the orchardists and nurserymen in the East should see that the legislatures enact stringent quarantine laws on all fruit shipped from the Pacific coast, with the privilege of destroying any coming from infected sections. There are other dreaded diseases, which, if once communicated to our orchards will cause the loss of thousands of trees.

For some time the Pacific coast states have been making war upon the trees imported from the East. It is believed by many that this is simply because these trees are from the East. The western states are now asking that their legislatures appoint inspectors to destroy trees from the East. Many editors of western papers that are not posted on fruit and fruit culture, ask their readers if any good can come out of the East. They do not wait for the reply from their readers, but the next line contains the answer which they give themselves,—"No; we must keep out *all* eastern trees," without regard to the section they come from or whether free from disease or not.

If many of our readers were to travel over the states of Washington and Oregon, they would be surprised at the shiftlessness shown in the care of not one or two dozen orchards, but hundreds of them scattered over these two states. We are positive there cannot be found in the entire state of New York an orchard which will show one-half the neglect which can be found in scores of orchards in those two states. They are completely covered with moss, which forms breeding places for all kinds of pests, the woolly aphis, oyster scale, San Jose scale, and a new bark disease which has recently been discovered attacking and destroying many hundred trees, all can be found in great abundance. Hundred of orchards have not seen a saw or a pruning knife in years. These diseases can be transmitted from section to section by the fruit. Hence, it is absolutely necessary that we enact laws and wage war against these immense pest-breeding orchards which are found in the three Pacific states, Washington, Oregon and California, for the San Jose scale, which has recently been discovered in the East, and will without doubt crop out this summer in other portions of this section of the country, has been brought across the continent on the fruit shipped from the Pacific coast. Unless these steps are taken, our orchards, which are worth millions of dollars to us, will be in the same condition as those at this time in the Pacific states.

We must agitate this question more and more and not delay taking active steps. The San Jose scale and woolly aphis are as disastrous to orchards as the peach yellows of some of the more eastern states.

We quote the following from Mr. Schanno, member of the Oregon State Horticultural Board, showing that this board realizes that this disease will spread and do disastrous work among our orchards: "It is quite probable that it will soon be necessary to have a certificate attached to all fruit shipped East, showing that it is free from San Jose scale."

Can we entrust the great fruit industry of this eastern country to inspectors, when they show no leniency toward our own products which find their way westward? This must be held in our own hands, thereby we can control our own interests as fully as do the nurserymen and orchardists of the Pacific coast. Eternal vigilance is the only thing that will save us.

APPLE ORCHARDS SERIOUSLY AFFECTED.

It is likely that the apple crop, which promised so well in the early part of the season, will be very small throughout Western New York and Southern Canada, promising

now to be little better than last year's yield. So report the owners of orchards in those localities. Heretofore insects and worms have been the great destroyers. This year a blight of a fungus nature is the cause of the trouble. It affects oak trees as well. The leaves, suffering under this blight, turn brown or black and curl up; as one grower describes it, the leaves look as if a torch light procession had passed under the trees, and that the heat had scorched and withered the leaves. The pear blight, called the "fire blight," and the quince blight, known as the "orange rust" have been carefully examined in the agricultural department of Cornell, and growers of those fruits have been provided with successful preventives for both blights by the state agricultural department. This blight on the apple and oak tree is apparently new.

ECHOES FROM NIAGARA FALLS.

The nineteenth annual meeting of the American Association of Nurserymen has passed into history and in the rush which characterizes every vocation in which Americans are found, the lessons which were taught at the Falls are likely to be forgotten. Chief among these lessons was that which urged the desirability of "getting together." The benefits of the association of ideas was felt during the two days convention, for there was not one present who would not say it was good to be there. More of the spirit of association should be fostered by the members between the dates of the conventions, when all are scattered throughout the country. There is an unmistakable tendency in this direction. It was very properly encouraged at the convention by President Hale, who, in discussing the introduction of new fruits said: "My idea is that in the introduction of a new fruit we ought to make sure first that it has decided merit and possesses some advantage not possessed by others of its class, and that we should test it thoroughly before putting it on the market. It might succeed admirably with the originators and be a failure everywhere else. I believe we should put it in the horticultural stations all over the country and let our friends take some of the stock and test it. Trust each other a little more. Do not be afraid that because you give your neighbor a bit of the stock he is going to sell it and rob you of the benefits. I do not think there are many nurserymen in the country who are going to do that sort of thing. Do not be too exclusive. If it proves meritorious advertise it and push it to your utmost ability, then you may or may not get a reward. I cannot tell you that and I don't believe anybody else can."

And W. C. Barry said: "The supply of many things seems to keep in advance of the demand. If the propagation of such stock could be reduced profits would be recorded where losses are now sustained. But these conditions are of course beyond control except by general consent."

If the obstacles in the way of general and systematic cooperation among the nurserymen of the country are too great to be overcome at present, might there not be a gradual extension of an understanding among the leading growers and dealers regarding the propagation of certain kinds of stock to the mutual advantage at once of those interested and the ultimate adjustment of difficulties which now exist? At all events only good can result from a closer alliance among the members of the American Association and efforts to increase the membership of that organization.

The July report of the Washington State Board of Horticulture states that during June fruit growers were constantly informed that the board requires nursery stock to be fumigated or otherwise disinfected; that buyers shall require of persons distributing to show certificates of inspection stating that the trees in their charge have been disinfected and appear free from insect pests. This indicates that there is no cessation of supervision of nursery stock arriving in the state.

Fall sales are reported light in many sections but there is much encouragement in the results of last spring's trade which showed that in spite of the panic the condition of business was much the same as in previous years.

RESULT OF A NURSERYMAN'S SUIT.

An interesting case was recently tried in the courts in Los Angeles, Cal. A nurseryman named Cunningham brought 400 lemon trees to Los Angeles some time ago and they were found to be infested with black scale. The county officers notified Mr. Cunningham that they would have to be fumigated, and he told them he would be glad to have them do the work. One of the officers, Mr. McMullin, then fumigated the stock in the car in which it was shipped. Upon subsequent planting, some of the trees died, and the nurseryman claimed damages. The matter was submitted to arbitration, and Mr. Cunningham not being satisfied with the result, brought suit against John Scott, horticultural commissioner, and his assistant, Mr. McMullin, for damages. The case was decided in favor of the defendants, the judge holding that Mr. McMullin had exercised the usual precautions, that he was a competent individual, and that the damage to the stock was not the result of negligence or lack of information on his part.

GEORGE W. CAMPBELL'S OPINION.

George W. Campbell, Delaware, O.—"I wish The National Nurseryman continued and have pleasure in sending you the amount of subscription. It is certainly a model of excellence in every way, both in its printing and composition, and well worthy the patronage of every nurseryman in our country."

Bird, Dew & Hale, Treeville, Tenn.—"We have been reading your journal for quite a while. It is useful to us and a splendid paper for nurserymen."

From Various Points.

The California Midwinter Fair closed on July 4th.

The Nursery and Seed Trade Association, limited, of London, England, is officered as follows: President, N. N. Sherwood, of Hurst & Son; secretary, G. Worrell, 30 Wood street, Cheapside E. C. It is a mutual protective association.

A Utah nurseryman has sold to Stewart & Eaton of Grand Junction, Colo., for next spring delivery, 13,700 prune trees. This firm proposes to set 120 acres with prunes. This will be the largest orchard of a single variety in Colorado.

The *Gardeners' Magazine* of London, England, says of the Antwerp exhibition: "The exhibition grounds are extensive, but somewhat over-planted. A large number of continental nurserymen have planted roses, conifers, flowering trees and shrubs, especially rhododendrons and azaleas, in various shaped beds. The conifers were far too closely placed either for effect or advantageous inspection, while the rose beds, with stout white-painted stakes supporting the standards, and huge white labels and black lettering against all the specimens were an eyesore, and altogether unworthy of our profession. The roses displayed the gardeners' art, but the stakes possibly were an advertisement for a dealer in timber, and the labels a triumph of some smith's work."

A correspondent of the New York Fruit Trade Journal, writing about the extensive orchard planting lately in Southern Missouri, says: "To convey a correct idea of the immensity of the fruit interest of this country, which, in a few years, will be one vast orchard, it is only necessary to state that it is estimated that 3,000,000 fruit trees were planted in 1892 on the south slope, and also a vast number on the north slope of the Ozark Mountains. Notwithstanding the heavy and constant immigration, principally from the Northwest, and the rapid development of the country, there are still thousands of acres of fine fruit land to be bought at from $3 to $10 per acre, according to distance from railroad stations."

Some very curious processes for propagation are practiced at the public gardens in Washington. One consists in cutting with a knife a ring around a branch of a plant. One might imagine that the intention was to kill the branch, but such is by no means the object in view. The cut having been made, a piece of wet moss is wrapped and tied around the branch at that point. Beneath this protection the sap exudes from the wound and little rootlets are developed. After a few days the branch is cut away from the parent stem, being then itself a complete plant, with roots all ready to put in a pot. The plan is adopted with plants of slow growth, because one plant may thus be split into half a dozen or more of good size, instead of waiting for a seedling or little slip to develop.—*Field and Farm.*

Counting the bearing and non-bearing orange trees in Florida, there are estimated to be 10,000,000 trees. California is credited with having 6,000,000 and Arizona about 1,000,000.—Juno, Cal., *Sun.*

One of the most important laws enacted by the New York legislature is the Nixon law, which appropriates $8,000 for fostering and promoting horticultural investigation. It takes the initiative in establishing among fruit growers a movement which corresponds to college extension. Professor L. H. Bailey, of Cornell university has taken active steps toward executing the provisions of the law.

The local orchard inspector of Mesa county opened a mare's nest the other day when he examined a shipment of 3,000 trees received from an eastern nursery. Two-thirds of the lot contained borers of various kinds and some apple trees were filled with the woolly aphis. If the inspector allowed these trees to be planted he failed to do his duty.—*Field and Farm.*

John F. Pfeiffer of Mesa county received lately a shipment of 225 fruit trees from the nursery of Croux et Fils, near Paris, France, says *Field and Farm.* This number includes about fifty varieties. Mr. Pfeiffer has set them all out on his orchard mesa place and they started to grow the second day of their acquaintance with Grand valley soil. Among those planted are about twenty varieties of the most famous foreign sweet cherries.

The New York legislature of 1893-'94 added amendments to an act incorporating the New York Botanical Garden, which will enable the promoters to push the project. The garden is to occupy grounds not exceeding 250 acres, either in Bronx park or in such other of the public parks north of the Harlem river as may be agreed upon by the park board of the city and the board of managers of the botanical garden.

Professor Meehan notes in *Meehan's Monthly* for April, the fact that peach trees shipped from certain eastern nurseries to the South for the past hundred years, have never shown symptoms of yellows, while trees from the same nurseries, and of the same stock, shipped to Michigan and other states soon show the disease. This is certainly a remarkable fact, and naturally leads Professor Meehan to infer that there must be something in the environment that produces the disease in the North while affording exemption in more southern climes. For this reason, Prof. Meehan believes that it is extremely unlikely that the yellows will ever be seen in California or Florida.

A. C. Glidden, of Van Buren county, Mich., writes to *The Country Gentleman:* "I have dug out the old orchard of over 100 trees on my farm, and am setting young trees of peach, pear, cherry and a few apple. The orchard had been set about 50 years, trees largely seedlings, top-grafted, with some of the old varieties as

root-grafts. It was in the condition that four-fifths of the orchards in our part of the state are in. The growth for several years had almost ceased. Decay had begun in the trunks, and in short, old age, with its lack of vitality, rendered them valueless for the production of fruit. Almost every farmer has this condition of things confronting him, and a few have already begun to get rid of the old trees.''

GENEVA NOTES.

Geneva, N. Y., July 25.—The eight inches of rainfall in May and June has been followed by four weeks of dry weather, which is now broken by fine rains. The effects of too much rain and of too little is, as usual, shown by different kinds of stock in various degrees of growth. Well established stock previous to this year's planting is making satisfactory progress. Spring plantings vary somewhat; the stand is usually good and budding is well along toward completion. The foliage, this year, on nearly all kinds of nursery stock, is of good character, broad, green, healthy and more free from insects than usual. The spring top-grafting of Kilmarnocks and Camperdowns was very successful and fine heads are the result.

Collections on wholesale and retail trade are reported satisfactory. Some large lots have been sold at wholesale and the retail sales are fully as large as a year ago at the same date. It seems that more and better men can be had in seasons of hard times, and fruit raising, though prices may be low, augments the increase from land and is profitable to to those who give it intelligent care.

Plans for next spring's planting are not known because not fully decided, but they will be conservative.

The whole community is in sympathy with Theodore Smith, secretary of W. & T. Smith Co., who last week lost his wife after a long illness. Two young children survive her.

R. G. Chase with his wife and son. are seeking health and pleasure in an extended European trip this summer. His well-organized business runs like a clock during his absence.

Our orchards and fruit farms are full this year of all kinds of fruit. Currants, late cherries and plums are most abundant, but the apple crop will be light and of poor quality.

RECENT PUBLICATIONS.

"The American Florist Company's Directory of Florists, Nurserymen and Seedsmen of the United States and Canada" is a reference book of more than ordinary value. It gives evidence of careful preparation and contains much information not found in other directories of this kind. There is a list of trade organizations, national and local; statistics relating to commercial floriculture and the nursery industry in the United States, a list of firms that issue catalogues and lists of cemeteries and park superintendents. Forty-five pages are devoted to seasonable hints arranged according to months. There are complete alphabetical lists of roses, chrysanthemums and carnations, and there are records to date in abridged form of the proceedings of meetings of the principal organizations of florists, seedsmen and nurserymen. The directory proper comprises one hundred pages of names in double column, according to states, and indicates the business in each case by means of a key. The volume is of convenient size. It has been highly spoken of by all who have used it. Chicago: The American Florist Co.

The Gardeners' Magazine of London, England, on July 7th. presented a handsome lithograph of the new H. P. rose, Clio, introduced by William Paul & Son, of Waltham Cross. It is a white rose with pink tint and is a prolific bloomer. In the same issue of that magazine portraits of the following well-known rosarians are given: John Cranston, H. Merryweather, Rev. A. Foster-Melliar, W. Rumsey, O. G. Orpen, A. Turner, C. E. Cant.

J. G. Stephenson, Girard, Pa.—"Every nurseryman ought to support such a journal."



Above is an illustration of the power machine manufactured by C. H. Joosten, 3 Coenties Slip, New York city, which was exhibited at the convention of the American Association of Nurserymen, at Niagara Falls. It will apply Fostite, Sulphur, Hellebore, London Purple, Paris Green, etc., to plants and fruit trees. It is driven by horse power by connection with one of the wheels of an ordinary farm wagon. It is especially useful in applying powder to grapes. berries, potatoes, cabbage, etc. For particulars address the manufacturer. The same machine may be run by hand power.

N·O·T·IC·E

Is hereby given that we are ready to quote "hard times" prices . . . . on . . . .

Apple. Lowest prices ever quoted. Below "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for cherry. Get our prices. . . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Gooseberries. Downing and Industry, very fine 2-years', first-class. Scarce. Order early. . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

SMALL FRUIT PLANTS

OF EVERY VARIETY.

Strawberries, Raspberries, Blackberries, Gooseberries, Currants.

SPECIALTIES:

EUREKA AND SHAFFER'S COLOSSAL RASPBERRY, NORTH STAR CURRANT, TIMBRELL, GREENVILLE, MUSKINGUM AND BEDERWOOD STRAWBERRY.

All Stock Guaranteed First-class and True to Name.

P. D. BERRY,

Box 412. DAYTON, OHIO.

Wants

Blackberry Root Cuttings, Currant Cuttings, 6 to 8 in. long, **Gooseberries, 1 year.**

Please price same and state what varieties can furnish. Also have in surplus for fall trade:

Apple by car lot, Cherry, Pear, Plum, Peach and Apricots.

Correspondence solicited. **B. WELDY,**
West Charleston, Ohio.

N. H. ALBAUGH, Pres't. F. G. WITHOFT, Vice-Pres't.

The Albaugh Nursery and Orchard Co.,

Headquarters for

BUDDED AND WHOLE ROOT GRAFTED **Apples, Cherries, Plums.**

AND A GENERAL ASSORTMENT OF NURSERY STOCK.

500,000 First-class Peach Trees for Fall 1894, of all the new and valuable varieties.

1,500,000 Marianna Plum stock for Fall 1894,

AT LOWEST RATES.

☞We took first premium on Diamond (trade mark) Peach at World's Fair.

The Albaugh Nursery and Orchard Co., TADMOR, OHIO.

FLEMER & FELMLY,

ROSELLE, N. J.

WHOLESALE GROWERS OF

PEACH, 1 yr. buds, handsome trees; **PLUM,** 2 yr. buds on Peach or Plum roots; **MEECH QUINCE,** 2 yr. buds; **APRICOTS,** 2 yr. buds on Peach roots; **APPLES,** from bud or graft; **MAPLES, LINDENS, HORSECHESTNUTS** and other shade trees; **WEEPING MULBERRY, WEEP. MT. ASH, ETC., CAL. PRIVET, SHRUBBERY, RHODODENDRONS and BUDDED ROSES. ETC.**

SEND US LIST OF YOUR WANTS. TRADE LIST FREE.

F. M. Hartman, Dansville, N. Y.,

OFFERS TO THE TRADE A FINE STOCK OF

2-Yr. Plums on Plum. 2 & 3-Yr. Apples, Budded.
2 & 3 Yr. Cherry, Sweet and Sour.
3-Yr. Standard Pears. 2-Yr. Dwarf Pears.

All the leading varieties. Send for prices. Correspondence solicited.

F. M. HARTMAN, Dansville, N. Y.

APPLE SEEDLINGS.

Apple Seedlings—Extra heavy, ¼ inch and up, per 1,000, ...
Apple Seedlings—No. 1, 3-16 and up, largely ¼ in. and up, per 1,000. . . . . .
Apple Seedlings—No. 3, 2-16 to 5-16 in., per 1,000, ...

Long Straight or Branched Roots, as ordered. Not excelled in France or America. Write at once for *very favorable* prices,

Address, **J. A. CAGE, Fairbury, Neb.**



CHINESE PRIMROSES;

Plants now ready to shift into three inch pots. Will come into bloom early. . - **FLOWERS** all fringed; large size; bright colors. Twelve sorts of the **BEST IN CULTIVATION.** ☞Send for list of varieties and prices. Sold during August and September Address,

HENRY S. RUPP & SONS, Shiremanstown, Pa.

Transon .·. Bros., .·. Nurseries,

Barbier Bros. & Son, Successors,

16 Route d'Olivet, - - Orleans, France.

HAVING this year a very large quantity of **Fruit** and **Forest Tree Stock, Young Ornamental Shrubs and Coniferous Seedlings, etc.,** of the best quality for sale, a preliminary list giving the lowest prices of these various stocks will be sent to our American customers.

This list will appear by the 1st of August, and may, on application, be obtained on or after that date, free of charge, from our agents, **Messrs. Knauth, Nachod & Kuhne, 13 William St., New York.**

Fairmount Nurseries,

TROY, OHIO.

We have in surplus for this fall's trade a fine assortment of

APPLES,
PEARS,
CHERRIES,
PLUMS,
APRICOTS.

DOWNING AND HOUGHTON GOOSEBERRIES,
MAGNOLIA ACUMINATA,
A FULL LINE OF
EVERGREENS AND
ORNAMENTALS.

—ALSO—

APPLE SEEDLINGS,

Send List of Wants.

CLOSE PRICES. CHOICE STOCK.

GEO. PETERS & CO.,

Troy, Ohio.

APPLE TREES

2 and 3 years old, 3-4 in. and up, 5 to 7 feet.

And all the lighter grades to offer for the Fall delivery of 1894 and Spring of 1895, at prices that cannot be beat. F. O. B. in car lots from any of the following points: Lee's Summit, Mo.; St. Joe, Mo,; Council Bluffs, Ia. and Sandwich, Ills.

Correspondence will be promptly answered from any of the above named points.

We are always in front in the race for the disposition of Apple Seedlings and Foreign Fruit Tree Stocks.

H. C. GRAVES & SONS,

Lee's Summit, Mo.

When writing to advertisers mention The National Nurseryman.

The North Star Currant.

THE BEST GROWER . . . . .
THE BEST FRUITER . . . . .
THE BEST SELLER . . . . .
THE BEST RED CURRANT

ON EARTH TO-DAY.

The "NORTH STAR CURRANT" is a rapid grower, a very prolific bearer of large fruit, of a sweet, delicious flavor, and yields a *sure crop* every year. The fruit does not shell or drop off nor does it scald. "THE NORTH STAR CURRANT" has more strong selling points, backed by genuine merit, than any other specialty on the market to-day.

IF YOU WANT something new that will secure orders *with good margins*, try the "NORTH STAR." For full information and reduced prices, write the introducers.

The Jewell Nursery Co.

LAKE CITY, MINN.

R. H. BLAIR & CO.,

Office Northwest Corner 11th and Walnut Sts., . . . Kansas City, Mo. . . .

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail,

STRICTLY NO. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM, ...

Roses, Ornamental and Shade Trees. Prices low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

PITTSFORD NURSERIES.

WALES M. NYE.
C. BURTON NYE.

We make a specialty of all the leading varieties of

STANDARD APPLES and PEACHES.

Also offer Pear, Plum, Cherry and Quinces.

Write and get our prices.

WALES M. NYE & BRO.,
PITTSFORD, N. Y.

THE MOST COMPLETE ILLUSTRATED DESCRIPTIVE CATALOGUE FOR NURSERYMEN

ever published, now ready for delivery. Printed on elegant paper from new plates. Two years labor devoted to preparing the copy. Over 128 pages. Smaller catalogue of the various departments for those who wish. Sample copy free to prospective buyers.

JOHN J. PINNEY,

Horticultural Printer, **Sturgeon Bay, Wis.**

300,000 PEACH TREES,

50 Varieties.

BUDS NOW READY.

WRITE AND GET MY PRICES.

J. G. Harrison & Sons.

BERLIN NURSERIES, BERLIN, MD.

When writing to advertisers mention The National Nurseryman.

APPLE SEEDLINGS.

(Wholesale Trade Only.)

We grew and sold **4,800,000** during the past season. We belong to no combine and will gladly quote prices on any amount at any time. We have also fine stock of

APPLE TREES, 1 and 2 years.
KEIFFER PEARS, 1 and 2 years.
CHERRY, 1 and 2 years.
PLUM, 1 year.

— AND —

French Pear Seedlings.

PRICES ON APPLICATION.

F. W. Watson & Company,

TOPEKA, KAN.

PEACH TREES.

THESE have been a leading feature in our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varieties known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BRO. & THOMAS,

Maple Avenue Nurseries, West Chester, Pa.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ. 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, Chester Co., Pa.

When writing to advertisers mention The National Nurseryman.

WOODLAWN NURSERIES,

ROCHESTER, N. Y.

ALLEN L. WOOD, PROP.

Wholesale Only. **No Agents.**

Grower of

SMALL FRUIT PLANTS.

We offer for the Fall of '94 and Spring of '95, the largest and most complete collection in the United States of high grade small Fruit Plants for Nurserymen and Dealers. Special attention is directed to the following Raspberries in large quantities:

50,000 Cuthberts, Transplants.
30,000 Carolina, "
75,000 Golden Queen, "

also Brandywine, Brinckle Orange, Herstine, Marlboro, Rancocas, Thompson's Early Prolific in transplants. Also an immense lot Doolittle, Gregg, Johnson's Sweet, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's Colossal and Tyler, of extra heavy tips for Fall.

Blackberries, 100,000 Snyder, root cuttings.

Also a large lot of Agawam, Ancient Briton, Early Harvest, Erie, Eldorado, Kittatinny, Lawton, Lucretia Dewberry, Minnewaska, Taylor, Wachusett, Wilson Early and Wilson Jr.

Currants, 50,000 Fay's Pro., 2 yrs.
25,000 White Grape, 2 yrs., extra fine plants.

Also 400,000 of extra fine 1 year plants of the following: Blk. Naples, Cherry, Blk. Champion, Red Dutch, Fay's Pro., La Versailles, North Star, Lee's Pro. and White Grape.

Gooseberries, Downing, 2 yrs., extra fine plants.

Also Golden Pro. (Pearl New,) Red Jacket, Smith's Imp., Triumph and Chautauqua.

Strawberries, Eight Acres.

Millions of Plants for early Fall trade. Headquarters for the great Greenville Strawberry. Testimonials from California to the Atlantic, from Maine to Texas. The best Strawberry that has been sent out since the Wilson Albany. Send your orders to me and get them True to Name. I also have all of the other leading kinds.

Asparagus, 2 year Roots.

Millions of the following varieties: Conover's Colossal, Palmetto and Elmira.

Rhubarb, 100,000 Myatt and Victoria,

Extra fine plants. Also large stock 2 yrs. Grape Vines of all the leading kinds

☞ For miscellaneous stock look at wholesale catalogue for Fall, ready August 1st. Free.

STOCK WANTED.

We need a car load of Dwarf and Standard Pear, also a lot of Ornamental stock, Forest and Apple tree seedlings. . . .

Having a large surplus of Apple, Grape Vines, Cherry, Small fruits and other stock, we would like to effect an exchange for such stock as we need. .

PROPOSITIONS TO FURNISH ALL OR PART WILL BE CONSIDERED.

The Hart Pioneer Nurseries,

. . . . . **FORT SCOTT, KANS.**

BUY THE BEST.

WHITNEY'S IMPROVED

Western Tree Digger.

Manufactured by

N. A. WHITNEY,

Send for Prices. FRANKLIN GROVE, LEE CO., ILL.

When writing to advertisers mention The National Nurseryman.

NURSERY PRINTING. NURSERY PRINTING.

∴We solicit your orders for every description of Nursery Printing. Our patrons are the leading nursery firms of the country. . . . . .

The Gelhaar, Fleming & Fuller Printing Company,

COOK OPERA HOUSE BUILDING,
: : : Rochester, N. Y.

A specialty is made of mail orders and we would be pleased to see the next order that you place for printing. The NATIONAL NURSERYMAN is from our press. . . . .

NURSERY PRINTING. NURSERY PRINTING.

FRENCH FRUIT TREE STOCKS.

Immense Stock Large Assortment.

LENAULT HUET,

Nurseryman at Ussy, Calvados, France,

offers Fruit and Forest Trees, Evergreens, Shrubs, Roses and a general list of Nursery Stocks of finest quality and high grade, with branches at Angers and Orleans. I am enabled to supply any wants of the trade at the most moderate prices. Before purchasing elsewhere send me an estimate of your wants and learn my prices.

Special care given to grading and packing. Satisfaction guaranteed.

Address all orders and enquiries to

C. H. JOOSTEN,

3 Coenties Slip, New York.

WANTED at the proper season, prices and catalogues of Conifer Seeds.

Knox Nurseries,

ESTABLISHED IN 1851.

1,500,000 APPLE TREES, 1, 2 AND 3 YRS. OLD.

Akin Red, Mam. B. Twig and Ark. Black, in large quantities. Also a large stock of Cherry trees and Evergreens. Our trees are as fine as can be grown, and they ripen up earlier than farther West. . . . . .

You will save money by sending us a list of your wants. . . . . .

H. M. SIMPSON CO.,

VINCENNES, IND.

SNOWHILL NURSERIES

NOW OFFER FOR **Fall Delivery, 1894**

.. ..

PEACH TREES, Fine Growth and Strictly Healthy, one year old from buds, and June Buds, all the most popular varieties, including **CROSBY and CHAMPION.**

Also, **20,000 1-YEAR OLD APPLE,**
2,000 NORWAY MAPLES, 8 to 9 feet,
5,000 CAROLINA POPLARS, 9 to 12 feet.
20,000 1-YEAR OLD GRAPE VINES,
500,000 ASPARAGUS ROOTS, 1 and 2 years old.

TWO MILLION STRAWBERRY PLANTS. *Price List now ready.*

Correspondence solicited. Address,

W. M. PETERS' SONS,

WESLEY P. O., WORCESTER CO., MARYLAND.

75,000 JAPAN PLUMS, all sizes from $\frac{1}{16}$ and up 5-6 ft, down to mailing size. Abundance (Botan), Berckman's Kelsey, Maru, Burbank, Bailey, Normand, Babcock, Chebot, Georgeson, Uchi Beni, Yosibe, Ogon, Satsuma, Yellow Japan, Prunus Simoni and Pissardi. New varieties: Willard and Sokio.

20,000 Crosby, Champion, Ellyson and Lorentz, hardy Peaches; Lincoln, Lincoln Coreless, Jap. Gol. Russet and Seneca Pears, 1 yr.; fine stock.

30,000 1 yr. Keiffers.

Heavy stock Strawberries, leading sorts at prices as low as good plants can be properly handled. Not grown on "Jersey Sand Banks." We don't have them here. Specialties: TIMBRELL, GREENVILLE, PRINCESS and MEEKS.

Plenty of Carolina Poplar, Silver Maple, Catalpa and Box Elder.

200,000 Asparagus Roots with long tails, grown on light soil. Conover's, Barrs, Palmetto and Elmira.

WRITE FOR PRICES.

We are NOT the "Largest Nursery in the U. S.," but what there is of us is "pretty nice."

THE ROGERS NURSERY CO.,

ISAAC C. ROGERS, Manager. **Moorestown, N. J.**

STARK BRO'S

Nurseries and Orchards Co.,

LOUISIANA, MO., ROCKPORT, ILL.

All *fresh* land and the very finest nursery soil. A very large general stock. Fruit trees by the million.

Staples, also many new leaders and favorites, including:

APPLE—Akin, Ark. Black, Babbitt, Jefferis, Kinnaird Choice, Nero, Paragon (Mam. Black Twig, Arkansas), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR—Bessimianka, Garber, Idaho, Koonce, Krull, Japan Golden Russet, Margaret, Pres't Drouard, etc.

CHERRY—Abbesse (Sweet Duke; best grower and hardiest Duke), Bl'k Tartarian, Improved, Cal. Advance, Ida, Montmorency Ord., Ostheimer, Suda Hardy, Windsor, etc.

PLUM—Abundance, Burbank, Clyman, Freestone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Mo. Apricot, Orient, Poole Pride, Tragedy and Golden prunes, World Beater, etc.

PEACH—Gold Dust, Northern Ap't, Sneed, Champion, etc.

APRICOTS—Sunrise, Noonday—new **large** Russians.

CRAB—Florence, Gibb, Richland Sweet, Looker Winter, etc.

GRAPES, GOOSEBERRIES, CURRANTS, BLACKBERRY, RASPBERRY, ORNAMENTAL TREES, EVERGREENS, ROSES, SHRUBS.

Capital Nurseries,

PETERS & SKINNER, Props.

NORTH TOPEKA, KAN.

We will have for fall of '94,

APPLE TREES, 2 and 3 years; KEIFFER PEARS, 1 and 2 years; CHERRY, PEACH AND PLUM TREES.

SEEDLINGS.

APPLE, OSAGE ORANGE, BLACK LOCUST, HONEY LOCUST, RUSSIAN MULBERRY.

PETERS & SKINNER,

Correspondence Solicited. **North Topeka, Kan.**

Kansas Apple Trees,

In Car Lots. None Better.

Ben Davis, Jonathan, Mo. Pippin, Gano, etc., etc. Also Standard and Dwarf Pear, Cherry, Plum and Peach. Largest stock of

CROSBY AND BOKARA PEACHES

in the West. These have stood 22 and 28 degrees below zero and fruited. Buds of all leading sorts for sale. A large stock of the celebrated KANSAS RASPBERRY plants. You will do well to let us hear from you.

A. C. GRIESA & BRO., Props.

Mt. Hope Nurseries, Established 1869. LAWRENCE, KANS.

APPLE SEEDLINGS,

1,000 to Car-Load Lots.

Apple, Pear, Plum and Cherry Trees,

Evergreens and Small Fruits, Pear Seedlings.

WHOLESALE PRICE LIST IN AUGUST.

Special Quotations Now. W. A. WATSON & CO.,

Normal, Ill.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

W. T. HOOD & Co.,

OLD DOMINION NURSERIES.

350 Acres under Cultivation. Richmond, Va.

FOR FALL 1894-SPRING 1895.

A very large stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs, Japan Pear Seedlings.

CELLAR, PACKING SHEDS AND BEST FACILITIES FOR HANDLING STOCK PROMPTLY.

COLOMBE BROTHERS,

USSY, (Calvados), FRANCE.

FALL OF 1894 AND SPRING OF 1895.

Mahaleb Cherry, 1 year, 4 to 8 m—m. Common Pear, 1 year, 4 to 6 m—m.
" " 1 " 2½ to 4 m—m. " " 1 " 3 to 4 m—m,

Other sizes of Mahaleb, Myrobolan, Pear, Apple, Quince, etc., at lowest prices. Also full assortment of Ornamentals.

LARGE, FNE STOCK THIS SEASON. CAREFUL GRADING. SUPERIOR PACKING.

ORDER EARLY.
Write and get my prices.

FRED. W. KELSEY,

. . . Sole U. S. Agnt. 145 Broadway, New York.

GEYER BROS.,

APPLES, PEARS, PLUMS, PEACHES, CHERRIES, GRAPE VINES. ROSES, &c.

ROCHESTER, N. Y.

STOCK AT LOWEST WHOLESALE PRICES.

CORRESPONDENCE SOLICITED.

GREENVILLE STRAWBERRY • • •

AND

DOWNING'S WINTER MAIDEN BLUSH APPLE,

Grown and for sale at their

ORIGINAL HOME.

For prices, plates, etc. write to E. M. BUECHLY,

Greenville, Ohio.

We Have It: Precipitated Sulphur
You Want It: Schloesing with Nicotine.

Insect Destroyer and Anticryptogamic Powder.

Radically destroys Caterpillar, Larva, Vine Fretters, Aphis and other Parasites of Agriculture, Trees, Vines and Vegetables growing. It rids Cabbage of the Caterpillar of the Pieride, Potatoes of the Doryphora, and cures Tomatoes, Peas, Lettuces, Cabbages, etc., of the Peronospora. It cures the Vine of the Oidium, Mildew, Rots, Anthracnose and other Cryptogamic diseases, destroying at the same time Insects infesting it, such as Pyrales, Altises, Attelabese, Erimose and Snails. It cleans Fruit Trees of Lanigerous Vine Fretters, of Hermes and the White Caterpillar, also Lucern of the Negril. It will keep away Ants, Grasshoppers, Locusts and Coleoptera. It protects the Vine from Grey Worms, and cures Plants of Chlorose and stimulates vegetation.

Mixing this compound with Manure will destroy Worms, and mixed with seeds, *protects same against attacks of Larva and Insects of all kinds.*

"*This is the most powerful and best Insecticide ever offered to the public.*"

Write us for prices, we want your orders, address all correspondence to

BERKHAN & OTGEN, 39-41 Cortlandt Street, New York

Sole Agents for United States.

When writing to advertisers mention The National Nurseryman.

Levavasseur & Sons Nurseries,

USSY (Calvados) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

BEST GRADING QUALITY AND PACKING.

Send your List of Wants for Special Prices to

BERKHAN & OTGEN,

39 and 41 Cortland Street, = = New York.

Sole Agents for the United States and Canada.

Orleans Nurseries Co.,

ORLEANS, FRANCE.

Growers of fine Fruit Stocks, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application. . . . ,

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - New York.

FOR SALE. A WELL STOCKED NURSERY, FARM

NEAR A GOOD TOWN.

Also a Green House, inside City Limits.

TERMS REASONABLE. Address, GUY. E. TRUITT,
Chanute, Kans.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

Geneva Nurseries. YOUNGERS & CO., Props.

. . GENEVA, NEB. . .

WE HAVE A LARGE SURPLUS OF

• SHADE TREES. •

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS**, and **OSAGE ORANGE HEDGE PLANTS**, all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

When writing to advertisers mention The National Nurseryman.

Syracuse Nurseries and "Lakeside" Stock Farm.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Plums.

A very fine line of

Ornamental Trees and Shrubs,

suitable for **LAWNS** and **PARKS**, and a very large exceptionally choice list of

Roses.

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

—OUR—

Live Stock Department

Is replete with **HORSES** and **CATTLE** of all ages and both sexes, of the following breeds.

STANDARD BRED,
FRENCH AND AMERICAN COACH.
CLEVELAND BAY,
HACKNEY,
CLYDESDALE,
PERCHERON.

and Driving, Coach, or Carriage Horses, single or in pairs.

—ALSO—

Holstein Friesian Cattle

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

SMITHS & POWELL CO., Syracuse, N. Y.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

. . BRIGHTON, N. Y. . .

I have to offer for Fall, 1894 and Spring, 1895, the following strictly first-class stock:

75,000 Apple Trees, **25,000 Standard Pears,**
10,000 Dwarf Pears, **15,000 Plum Trees,**
15,000 Cherry Trees, **10,000 Peach Trees.**

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

I Offer for Fall 1894.

Clematis.—Strong plants. Own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh: Crispa; Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.
Honeysuckle.—Hall's Japan, Monthly Fragrant.
Ampelopsis Veitchii. American Ivy.
Japan Snowball.—Strong, fine plants.
Roses, H. P's and Mosses.—Strong plants, own roots and budded.
Tea Roses.—Fine plants, 4 inch pots.
Tree Roses.—Elegant plants. Low price.
Oak-leaf Mt. Ash.—Elegant trees. Low price.
Weeping Mt. Ash.—Fine heads.
Cut-leaf Birch.—8 feet, perfect trees.
Purple Birch.—4 feet, **true purpurea.**
Young's Weeping Birch.—5 feet stems.
Lilac, Weeping Pendula.—5 feet, not budded on lilac.
Hydrangea P. G.—A fine lot of strong plants.
Flowering and Foliage Shrubs.—Fine assortment.
Paeonies.—A grand collection.
Paeonies, Tree.—Nice plants in quantity.
Gooseberries.—In variety; 2 year Plant.
Blackberries.—Strong, nicely trimmed to one cane.
Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry, North Star.
Grape Vines.—A complete assortment.
Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

JOHN PALMER & SON, Ltd.,

Annan Nurseries, - - Dumfriesshire, Scotland.

Have for FALL and SPRING SHIPMENT an IMMENSE STOCK of . .

INDUSTRY GOOSEBERRIES, one, two and three years, carefully selected and well graded.
Whitesmith, Crown Bob, and Lancashire Lad Gooseberries, No. 1 stock.
H. P. and Moss Roses, best sorts, strong and good.
Tree Roses, good bushy heads, good roots.
New Polyantha Rose, "Crimson Rambler," the finest of its class in the world.
New Hybrid Sweet Briers, a sterling novelty.
Clematis Jackmannii, and other most popular varieties, two-years, strong plants.
Rhododendron, hybrid grafted, best and hardiest sorts from one to three feet.
Rhododendron Ponticum, well set with flower buds, all sizes, very cheap.
Manettii and Multiflora Rose Stocks, well rooted.
Norway Maples, 18 to 24 in., two to three and three to four feet. Straight trees, carefully transplanted.
Cut-leaved Weeping Birch, two to three, three to four, and four to five feet.
Mountain Ash, Scotch Larch, Birch and Elms, Beech, Linden, California Privet, Norway Spruce, Austrian and Scotch Pine, Hydrangea Paniculata Grandiflora, and a general line of stock of the best sizes for export.

Lowest Through Rates to all points in the United States and Canada.

Catalogues Free.

Write for prices before ordering elsewhere. Correspondence and early orders solicited.

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

(In Car-load Lots.)

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . . HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

WANTS

PEACH, PEAR, PLUM AND CHERRY IN CAR LOTS.

NEED ALSO GENERAL LINE OF

Ornamentals · and · Small · Fruits.

We Offer Apple Trees in Car Lots and Apple Stocks in Any Quantity.

H. C. GRAVES & SONS,

COUNCIL BLUFFS, IOWA.

ESTABLISHED 1852.

Phoenix Nursery Co.,

600 Acres. . .
13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS — Wholesale and Retail.

Correspondence solicited and promptly answered.
Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. . . . **BLOOMINGTON, ILL.**

The SPARTA NURSERIES

Always have in stock their Dry Baled Moss. Same quality in bulk.

The Finest Grade of Strawberry, Rasperry and Blackberry Plants Ever Offered. Write for prices.

Sparta, Wis., Aug. 1, 1894. . . **Z. K. JEWETT & CO.**

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON.

Write me for easy terms and prices. TOMAH, WIS.

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,
ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR UNITED STATES AND CANADA. ❋ ❋ ❋

ANDRE L. CAUSSE,

105 and 107 Hudson St., New York City.

GET MY PRICES.

Standard Apple, Pear, Plum and Cherry Trees.

ALSO DWARF PEARS, EVERGREENS,
ORNAMENTAL TREES AND SHRUBS.

FINEST STOCK IN THE COUNTRY.

GILBERT COSTICH, . . Rochester, N. Y.

Nurserymen's Stock Book.

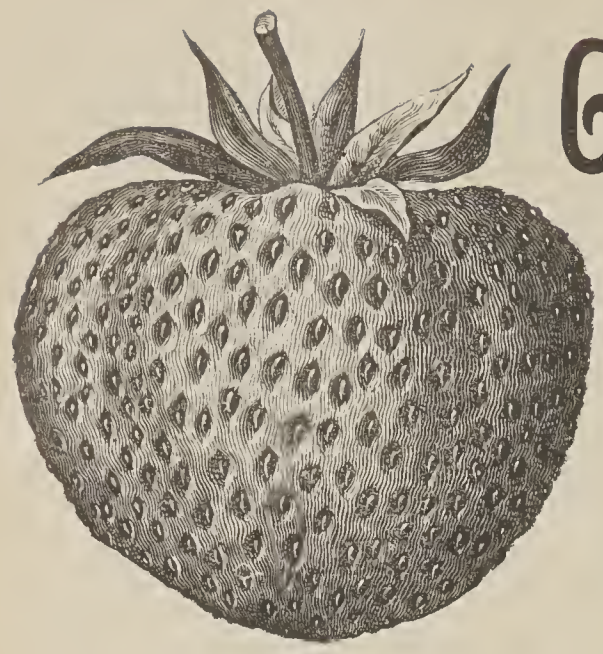
COMPLETE AND PRACTICAL.

Size, 16x21 inches.—58 pages. Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,
ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.



GREENVILLE and CROSBY.

REPORTS FOR 1891.

"One of the very best of 150 varieties fruited at Missouri Experimental Station. Crescent, the only one equaling it in productiveness, while but two excelled it in size."—JOHN W. CLARK, Horticulturist.

"A new berry of many excellent points, very large, good quality, and equally valuable for market and home."—GEO. C. BUTZ, Penn. Experimental Station.

REPORTS FOR 1892.

"Most productive of twenty-five selected varieties."—PENN. EXPERIMENTAL STATION.

"In your list of varieties Greenville merits first place, either for home use or market."—MISSOURI EXPERIMENTAL STATION.

Comparisons were obtained between Greenville, Warfield, Haverland and Bubach, from Six States, embracing the Experimental Stations of Ohio, Indiana, New York, Missouri and Minnesota, W. S. Scoville, of Wisconsin, and the Secretary of the Ohio State Horticultural Society.

By grading of above authorities on "Scale of Ten," Greenville leads for home use and market, as it received the highest average.

REPORTS FOR 1893.

By the average of Experimental Reports this year ***"Greenville leads for productiveness, market, home use and general purpose.*** See summary below:

This Summary is Based on Reports of the Ten State Experimental Stations named opposite.	Productiveness.	Market, Near.	Market, Distant.	Home Use.	General Purpose.
GREENVILLE,	1	1	2	1	1
WARFIELD,	4	6	1	6	5
HAVERLAND,	2	2	4	4	2
BUBACH,	6	4	5	5	7
CRESCENT,	3	7	7	8	3
CUMBERLAND,	8	3	6	2	8
ENHANCE,	5	8	8	7	6
GANDY,	7	5	3	3	4

OHIO. DELAWARE.
INDIANA. MASSACHUSETTS.
PENNSYLVANIA. MISSOURI.
SOUTH CAROLINA. MICHIGAN.
OREGON. MINNESOTA.

The "Scale of Ten" is based on a score of ten points, and the variety obtaining the highest grade is given first place. The figure 1 represents first place; 2, second place, etc.

No Stations sent comparisons on this list, for 1893, except the ones named above.

At the Annual Convention of the American Association of Nurserymen, held at Niagara Falls, June 6-7, 1894. The Committee on Exhibits class "Greenville" as being of ***large size, very good quality, moderately firm, and valuable for market, home use or general purpose.***

CROSBY Still leads for "Hardiness and Reliability of Crops."

TWELVE YEARS WITHOUT A FAILURE.

In a letter received June 1st, 1894, J. H. Hale says the fruit this year on Crosby will have to be thinned to obtain the best fruit; whereas on ALL other varieties in his orchards, only a few scattering peaches can be found, and that were all his trees of the Crosby, it would make him ***Fifteen Thousand Dollars*** more this year.

BUDS FOR SALE.

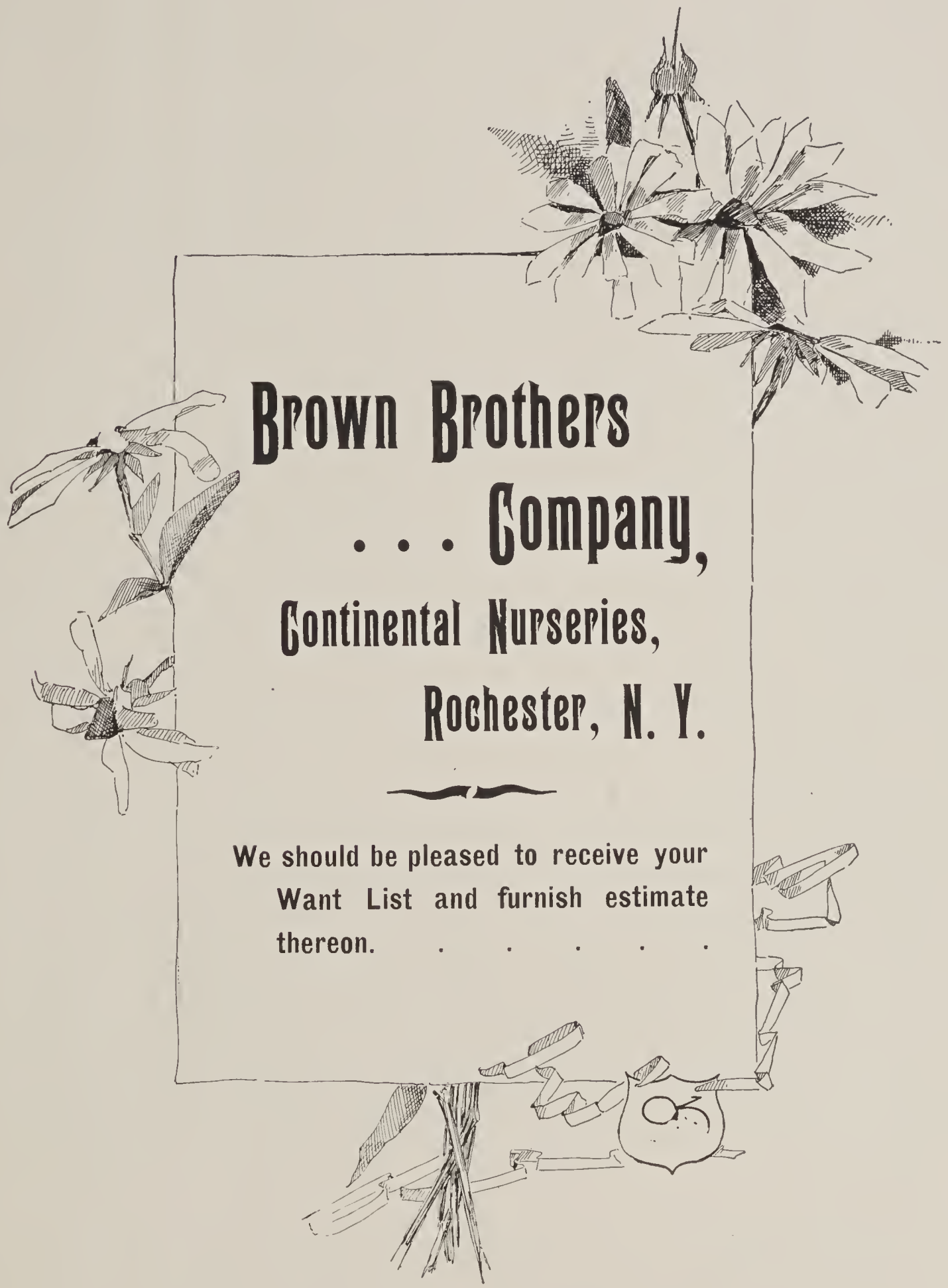
Sixteen page Catalogue, 1894, on Crosby and Greenville, sent free on application, also sample lithograph plates of Greenville. Write for prices and list of wants.

Resp.,

WILL EXCHANGE FOR STOCK NEEDED.

The Farmers Nursery Co.,

TADMOR, OHIO.



Brown Brothers . . . Company,

Continental Nurseries,

Rochester, N. Y.

We should be pleased to receive your Want List and furnish estimate thereon. . . . . .

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

September, 1894.

Painesville Nurseries.

Fruit and Ornamental Trees, Small Fruit and Grape Vines, Shrubs, Roses and Bulbs Hardy and Tender Plants.

LARGE ASSORTMENTS NEW AND OLD VARIETIES.

UNEQUALLED FACILITIES FOR PROMPT AND ACCURATE FILLING OF ALL ORDERS, LARGE OR SMALL. NO BETTER PLACE FOR NURSERYMEN TO SORT OR DEALERS TO PACK. IMMENSE CELLARS AND PACKING HOUSES. ORDERS BOOKED THIS FALL AND CARRIED IN CELLAR FOR EARLY SPRING SHIPMENT.

DECIDUOUS, UPRIGHT AND WEEPING TREES.

Large Stock of Splendid Trees at Low Rates of

Poplars—Carolina, Lombardy and Golden. Mountain Ash—European, Oak-leaf and Weeping. Alder—Imperial, Cut-leaf and European. Willows—Kilmarnock, New American, Rosemary, Babylonica, Laurel-leaf and Gold Bark. Elms—American, Scotch, Red, Purple-leaf and Camperdown. Linden—European, Silver and Weeping. Maples—Silver, Norway, Ash-leaf, Wier's, Schwedlerii, etc. Magnolias—Acuminata, Soulangeana, Speciosa, Purpura, etc. Mulberries—Teas' Weeping, Russian, White and Black. Balm of Gilead, Purple Beech, Catalpas, Horse Chestnut, Larch, Russian Olive, Tulip, Flowering Thorns, etc., etc.

NUT TREES.

HEAVY STOCK, ALL SIZES.

Chestnut—American, Spanish and Japan. Walnuts—Black, English and Japan. Butternuts, English Filberts, Shell Bark Hickory, Almonds, Pecans. etc.

ROSES.

LARGEST STOCK IN THE U. S.

Hybrid Perpetual, Moss and Climbers; strong field grown; better and cheaper than imported.

TREE ROSES for Fall Delivery; very fine.

BULBS for Fall Trade direct from the best Holland and French growers.

Highest Quality at Lowest Rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. **1000 ACRES.** **28 GREENHOUSES.**

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

A FEW SPECIALTIES FOR FALL OF OUR 1894.

GOOSEBERRIES.

Supurb plants of DOWNING, INDUSTRY and COLUMBUS.

CURRANTS.

Fine Plants of CHERRY, FAY'S, VERSAILLAISE, VICTORIA and WHITE GRAPE.

HARDY ROSES.

Without doubt the finest collection in America; strong plants, budded and on own roots, for October delivery.

HORSE CHESTNUTS, AMERICAN CHESTNUTS, CAROLINA POPLARS.

Handsome and well grown trees.

Send for our prices on the above, also on all kinds of general Nursery Stock.

ELLWANGER & BARRY, Mt. Hope Nurseries,

ROCHESTER, N. Y.

"The most complete nurseries on the American Continent."

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

KAWANA, MITCHELL CO., N. C.
(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

STANDARD AND DWARF PEAR,

APPLE, PLUM, CHERRY, RUSSIAN APRICOTS, CUT-LEAVED WEEPING BIRCH,

And Low Budded Roses on Manetta Stock.

Prices Low and Stock Good.

Special Prices on Car Lots.

JAY WOOD,

KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

NEWARK, WAYNE CO., N. Y.

GROWERS OF

Choice Specialties for Nurserymen & Dealers.

ROSES—Hybrid Perpetuals, Mosses and Climbers; strong two year old plants on own roots; much superior to imported stock as they are strong, acclimated and true to name. Budded plants of those kinds which can not be grown on own roots.

☞**HOW IS THIS? 20,000 Roses without a single second-class plant.**

Jackson & Perkins, Newark, N. Y.:

GENTLEMEN—We were well satisfied with the character and grade of the roses which you shipped us this past spring. *Of the 20,000 plants we were not obliged to reject any.*

Very truly yours, R. G. CHASE & CO., Geneva, N.Y.

CLEMATIS.—The largest stock in this country. Over **twenty-five varieties**; extra strong, well-rooted plants.

HONEYSUCKLES.—An extra large and fine stock of Hall's Japan; also Monthly Fragrant, Scarlet Trumpet, Red Tartarian, etc.

HYDRANGEAS.—Paniculata (2 to 3 ft.) Otaksa, fine strong plants.

JAPAN SNOWBALLS.—Extra large, strong plants.

LILACS—A large stock; strong plants; good assortment.

CHINESE PURPLE WISTARIAS. AMPELOPSIS VEITCHII.

PAEONIAS.—Large undivided tubers; the finest varieties obtainable in France or Italy.

EVERGREENS.—Austrian Pine, Norway Spruce, American Arbor Vitae, etc. All liberally graded, healthy and of good color.

ORNAMENTAL TREES.—Cut-leaf Birch, Kilmarnock Willows, Teas' Weeping Mulberry, Double Red Flowering Horse-Chestnut, Catalpas, Oak-Leaf Mountain Ash, etc.

GRAPE VINES, FRUIT TREES.

Our new list will be mailed to the trade early this month. If not received drop us a line.

NOTE.—*We do not price our list*, for the reason that we can usually quote better prices when we know the exact wants of a buyer in the various lines or varieties, than we can by pricing items separately. In writing for prices, state quantities wanted as far as possible.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing*.

Send for Price-list and Circulars.

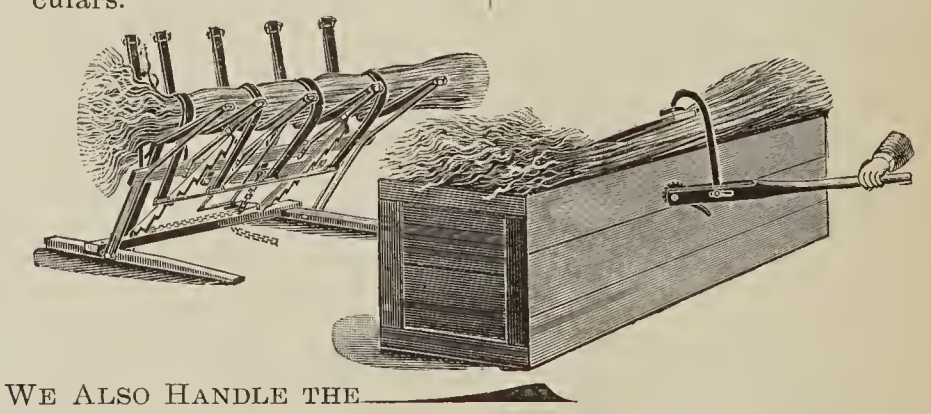
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp. ✳

It is *simple* to use as a *cant hook*. Can be adjusted by rolling ratchet so that rib will come *exactly* to place. ✳



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Balers, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

When writing to advertisers mention The National Nurseryman.

THE BEST ROSES,

Azaleas, Rhododendrons. Clematis, Etc., are supplied by the

BOSKOOP HOLLAND NURSERY ASSOCIATION.

For catalogues and prices address, **C. H. Joosten,**

3 Coenties Slip, New York.

C. F. McNAIR & CO.,

DANSVILLE, N. Y.

STANDARD APPLES, STANDARD AND DWARF PEARS, PLUMS, CHERRIES, ETC., IN LARGE ASSORTMENT FOR FALL, '94, AND SPRING, '95.

WRITE FOR PRICES.

Correspondence Solicited.

C. F. McNAIR & CO., Dansville, N. Y.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

IN CAR LOAD LOTS

Apple, Carolina Poplar,
Cherry, Silver Maple,

ALSO, A GENERAL ASSORTMENT OF OTHER STOCK.

PEACH, PLUM, PEAR (Standard and Dwarf), **GOOSEBERRIES, CURRANTS,** and other **SMALL FRUIT AND ORNAMENTAL TREES AND PLANTS.**

Complete List of Varieties; : : : : : : : :
Stock Young, Thrifty, and of Best Quality; :
Carefully Graded and Handled. : : : : : :

Write for SPECIAL PRICES in CAR LOAD LOTS. Personal inspection courted. SPADER—see Trade List. Trade List ready September 1st.

ALBERTSON & HOBBS,

BRIDGEPORT,

MARION COUNTY, - - - - INDIANA.

When writing to advertisers mention The National Nurseryman.



GREEN MOUNTAIN GRAPE.

25,000 Two and Three Year Vines of prime quality. Will fruit next season.

Also, a General Line of Nursery Stock.

Including **75,000 CHERRY,** La Versailles & Fay's **CURRANTS,** and four acres of two-year Apple Seedlings, a large stock of Handsome Maple Trees and other stock too numerous to mention. Send to us your list of wants. Address,

STEPHEN HOYT & SONS, New Canaan, Conn.

Baltimore and Richmond Nurseries

Offer for Fall '94 and Spring '95 large stock of the following:

Apple, Peaches, Plum (Japan and others), **Apricots, Nectarines, 1-Year Standard Pear** (heavy on Kieffer, Garber and Clapp's Favorite), **Grape, Asparagus, Strawberries, Osage Orange, Shade Trees, Evergreens, Shrubs, Etc., Etc.**

Well-Graded Stock! Prompt Shipment!

SATISFACTION GUARANTEED.

Special attention to growing Peach Trees of which we have the usual quantity. We are prepared to give prices to suit the times.

Franklin Davis Nursery Co.,

Baltimore, Md.

1838. 56 Years. 300 Acres. **1894.**

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.
Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.
Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.
French, Persian, English, Japan Walnuts.
Pecans, Almonds and Filberts.

NOVELTIES. Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifollate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES, WILLIAM PARRY, PARRY, N. J.

When writing to advertisers mention The National Nurseryman.

Brighton Central Nurseries.

OFFER FOR FALL, 1894,

A VERY COMPLETE STOCK OF THE FOLLOWING:

HARDY HYDRANGEAS, (2½ to 3 ft.)

IVYS, American and Ampelopsis.

HONEYSUCKLES, Hall's Japan, Scarlet Trumpet, Monthly Fragrant and Tartarian.

LILACS, very fine.

SHRUBS, Golden Syringa, Wiegela (all sorts), Wisteria Purple, Spirea (all sorts), Purple Fringe Calycanthus, Snowballs, Japan Quince.

HEDGE PLANTS, California Privet, Norway Spruce, American Arbor Vitæ.

EVERGREENS, Norway Spruce, American Arbor Vitæ, Irish Juniper, Colorado Blue Spruce, Douglas Spruce, Concolor Spruce.

ORNAMENTAL TREES, Carolina Poplar—largest stock in America, Silver Maple, Wier's Cut-Leaf Maple, Norway Maple, American Elm, Catalpa Speciosa, Russian Mulberry, Purple Beech, Paul's Double Thorn, White Thorn, Oak Leaf Ash, Mountain Ash, European Linden.

WEEPING TREES, Kilmarnock Willow, Teas' Weeping Mulberry, Cut-Leaf Weeping Birch.

CURRANTS, tree and bush, very fine.

FRUIT TREES, all grades. Large stock of Apples, Standard and Dwarf Pears, Plums, Peaches, Cherries, Meech's Quince, Rea's Mammoth Quince.

ROSES, Hybrids, Perpetuals, Mosses and Climbers; very fine stock. Also 700 **Tree Roses, XX.**

RHODODENDRONS, Hybrids and Ponticums. Large stock; fine plants.

NUT TREES, American Chestnut—all grades, Spanish Chestnut, English Filbert, Eng. Walnut.

J. FRANK NORRIS,

SEND FOR PRICES.

BRIGHTON, N. Y.



THE GREEN MOUNTAIN GRAPE.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

U.S. DEPARTMENT OF AGRICULTURE RECEIVED BUREAU OF STATISTICS

VOL. II. ROCHESTER, N. Y., SEPTEMBER, 1894. NO. 8.

SPRAYING NURSERY STOCK.

A recent bulletin issued by the U. S. Department of Agriculture discusses in an interesting and instructive manner the effects of spraying nursery stock with fungicides. The experiments were conducted by Professor B. T. Galloway and his assistant, P. H. Dorsett. The bulletin states :

Nursery stock, especially pears, cherries, plums and apples, is subject to several fungous diseases which attack the foliage, causing the latter to lose its vigor and fall prematurely, or dry up and become useless to the plant. The diseases attacking the pear, cherry and plum are commonly known as leaf blights, while the one affecting the apple has received the name of powdery mildew. All the diseases mentioned attack both seedlings and budded or grafted stocks, and, as a result, in the case of seedlings, the active wood ripens so that the buds can not be inserted, or if they are inserted the union with the stock is imperfect and the bud dies ; if the bud or graft should grow, its development is checked by the annual early loss or drying up of its leaves. This brings about a stunted development from which it is doubtful if the tree ever fully recovers.

The series of experiments which are considered in the bulletin were begun in the nurseries of Franklin Davis & Co., at Mullikin, Md , in the spring of 1891, and were completed in the autumn of 1893. The work had for its object primarily the obtaining of some definite information as regards the effect on the growth of the trees of applying fungicides, beginning with the seedling or cutting and continuing until the budded trees were 2 years old. Incidentally it was thought the experiments would throw some light on the question of the relative value of the various stocks so far as resistance to disease and effect on the growth of the bud were concerned. It was arranged that the treatments should begin with the seedling and continue each year until the tree was of salable size. The first year different stocks were to be budded at the usual time, the buds of at least three varieties being inserted in each kind of stock, and careful records were to be kept of the growth of both treated and control seedlings, their condition at budding time, the number of buds inserted, and the number of buds which took. An account was also to be kept of the number and date of the treatments, as well as the time required in making the applications and the amount of material used. The second year's observations were to be made on the growth of the budded stocks, the behavior of the different varieties, so far as resistance to disease was concerned, the time occupied in making the treatments, and the amount of material used. The third and last year, or when the budded stock was 2 years old, careful notes and measurements were again to be made of the growth, the time and material were again to be taken into account, and finally the stock was to be carefully graded and photographed.

It was hoped that by following this plan it would be possible at the end of the experiment to settle two practical points with a reasonable degree of accuracy, namely : (1) the cost of treating the various kinds of stock, and (2) the profit or loss resulting from such treatment. For the experiment as a whole, 6,000 seedlings and cuttings were used, as follows ; Japan pear seedlings, 1,000 ; French pear seedlings, 2,000 ; Cherry stocks (Mahaleb), 500 ; apple seedlings, 2,000 ; plum stocks (Marianna), 500. The stocks were planted in a piece of ground 700 feet long by 21 feet wide, the block as a whole being divided into thirty-three plats, in such a way as to insure as nearly as possible uniformity in soil conditions and cultivation for all the trees.

The fungicides used in the work were as follows : Bordeaux mixture, containing 6 pounds of copper sulphate and 4 pounds of lime to 22 gallons of water ; ammoniacal solution of copper carbonate, consisting of 3 ounces of copper carbonate dissolved in 1 quart of ammonia and diluted with water to 30 gallons ; and potassium sulphide solution, made by dissolving $2\frac{1}{2}$ ounces of potassium sulphide in 10 gallons of water. The applications were made with a knapsack pump and Vermorel nozzle, and were so arranged the first year that some of the stocks were sprayed seven times, some six times, and some five times. The reason for adopting this plan was to determine (1) the effects of early treatments on leaf blights, and (2) the effects of treatment up to the time of budding compared with those continued a month after the buds were inserted. As already pointed out, every plat was budded with three varieties, the object being to obtain for future work stocks susceptible, moderately susceptible, and resistant to disease. For pears, Tyson, Lawrence, and Kieffer were selected ; for cherries, Early Purple, Governor Wood, and Black Tartarian ; for plums, German Prune, Shippers Pride, and Lombard ; and for apples, Rome Beauty, Ben Davis,

and C. R. June, the resistant qualities of each variety being in the order named.

RESULTS OF FIRST YEAR'S WORK.

The treatments the first season on the plats receiving seven sprayings were made May 5 and 19, June 1 and 16, July 3 and 21, and August 10. The plats receiving six treatments were sprayed May 19, June 1 and 16, July 3 and 21, and August 10; while the plats receiving five treatments were sprayed the same as those receiving seven, excepting the two last sprayings, which were omitted, budding having commenced on July 21. Up to the time of budding, leaf blight caused little damage, this being unusual, especially in the case of pear seedlings.

To obtain the desired information as to the effects of the treatments on the stocks with respect to budding, three grades were established, and as each bud was inserted the stock was referred to its respective grade. The grades were, (1) stocks which worked with ease, i. e., those in which the bark slipped easily; (2) stocks which worked with difficulty; (3) stocks which refused to work. There were no striking differences between the treated and untreated trees as far as their condition for budding was concerned.

The results of the first year's work were that with the pear stocks graded on August 24th, as first quality, all leaves perfect; second quality, spotted here and there, but none lost; third quality, all leaves showing spots and tree partly defoliated; fourth quality, trees entirely defoliated; 42 per cent. of the untreated Japan pear seedlings and 78 per cent. of the untreated French pear seedlings were classed as fourth quality, while the Japan pear seedlings, treated five times with Bordeaux mixture, gave only 14 per cent. fourth quality, while those treated seven times showed but 6 per cent. totally defoliated. Bordeaux mixture gave better results than ammoniacal solution of copper carbonate.

RESULTS OF SECOND YEAR'S WORK.

In the second year's work the plats which received seven sprayings in 1891 were treated on May 24, June 4 and 16, July 7 and 23, and August 10 and 30, respectively; those which received six sprayings in 1891 were treated on June 4 and 14, July 7 and 23, and August 10 and 30, respectively; while those treated five times received the applications on May 24, June 4 and 16, and July 7 and 23, respectively. In the case of the pears, from 10 to 20 per cent. of the buds inserted in trees receiving no treatment died, while in case of the treated trees the number which died in no instance exceeded 12 per cent. Next to the pears, the plums and cherries showed the effects of the treatments most decisively. There was very little difference between the treated and untreated apples so far as the number of buds which grew and the growth of the buds were concerned. Bordeaux mixture in all cases gave the best results, the effects of this preparation on the growth of the pears being very marked. On July 23 measurements showed that the treated pear trees were from 10 to 15 per cent. larger than the untreated.

RESULTS OF THIRD YEAR'S WORK.

In the third year the most interesting results were obtained. The trees were sprayed as before. On October 20 comparisons were made and photographs were taken. The height of the untreated trees, Tyson on Japan stocks, varied from 2 to 3 feet, and the caliper from one-fourth to three-eighths of an inch. The Tyson on Japan stocks, treated, averaged 5 to 6 feet in height and calipered almost uniformly three-quarters of an inch. It would take at least two years more to grow the untreated trees to the size of the treated. As a whole the Tyson on French stocks made a better growth than those on Japan stocks, the size of the trees, especially those treated, averaging greater, besides being more even.

The best growth of any of the stock was made by the Kieffers.

The Tyson trees on French stocks sprayed with ammoniacal solution of copper carbonate were better than the untreated, but not nearly so good as those sprayed with Bordeaux mixture.

There was very little difference between the Keiffer on Japan and the Keiffer on French stocks. The former made a slightly stronger growth, but not enough to be markedly appreciable.

COST AND PROFIT.

In an experiment such as is here described it would be difficult to fairly estimate the cost of treating each year the various kinds of trees under consideration. There are so many delays from one cause or another that figures based upon the actual time expended in the work would be misleading. In estimating the cost, therefore, we have decided to go outside of the actual experiment for data. In the nursery proper, where the experiments were carried on, from 500,000 to 800,000 trees, including pear, apple, cherry, and plum, are sprayed each year. In this work three kinds of spraying machines have been used, namely, (1) knapsack pumps; (2) machines drawn by horse power, but operated by hand; (3) automatic machines, drawn and operated by horse-power. With the last, three men can spray about 100,000 seedlings a day. Using such a machine and taking the facts brought out by the experiment proper as a basis, together with the average price paid for labor and chemicals, it is believed a fair estimate of the cost of treating pear, plum, and cherry stock the first year, or before and after the buds are inserted, will be about 25 cents for 1,000 trees. The next year, or when the buds are making their first season's growth, the cost of the work will probably not exceed 25 cents, while the following season, or the second year from the bud, the cost will be increased 10 to 15 cents, or about 40 cents per 1,000. On this basis the entire cost of treating trees until they are 2 years old from the bud will range from 85 cents to $1 per 1,000, or about 1 mill per tree.

In the matter of profit the trees were taken just as they stood, and their value was fixed in accordance with the grading, as already described, and the prevailing average wholesale price. If the trees could have been treated as a whole, in a large, solid block, there is little doubt that the results would have been more decisive, as the chances for infection would, to a certain extent, have been lessened. As the experiment was carried on, nearly every block of treated trees was surrounded by untreated ones, thus furnishing the severest test for the fungicides. The net profit resulting from the work in the case of pears and cherries ranged from $1 to $40 per 1,000 trees, the average being $13 per 1,000.

SPRAYING PEAR SEEDLINGS.

The effect of spraying on the growth of Japan and French pear seedlings was noted by a separate experiment. There was a gain of 1,133 per cent. in the weight of the treated trees and 522 per cent. in the untreated, a difference of 611 per cent. in favor of the former.

A striking fact brought out by the experiment is the great vigor of the Japan seedlings. In all cases they made a much better growth than the French. The Japan seedlings as a whole weighed before planting 5 pounds $1\frac{4}{10}$ ounces, while the French weighed 6 pounds $2\frac{1}{10}$ ounces, a difference of 1 pound and $\frac{7}{10}$ ounce in favor of the French trees. The Japan trees after treatment weighed 45 pounds, while the French weighed 12 pounds 11 ounces, a difference in favor of the Japan stocks of 32 pounds 5 ounces.

Aside from the facts noted in regard to weights, some interesting points are brought out by comparing the data bearing on height and caliper. In the matter of height the treated Japan trees averaged at the close of the experiment 43 inches, while the untreated averaged the same, thus showing that the increase in growth in this case was not in the direction of length. The French trees not treated averaged 24 inches in height, while the treated averaged 30 inches. In this particular case the Japan seedling proved superior to the French in all cases, as will be seen by a comparison of the second averages.

CROSSBRED SEEDLING CURRANTS.

Jacob Moore, of Attica, N. Y., sent us some time ago samples of crossbred seedling currants which are deserving of special notice. They formed the finest collection of seedlings we have seen this year. All were crosses of White Grape and Cherry currants. In each case a large, rich currant was the result. The crossing had a tendency to soften the acidity of the Cherry and improve the quality. Intelligent care and cultivation by so distinguished an originator as Mr. Moore has developed strong-growing bushes which are prolific and which promise to take a prominent place at once among the small fruits most in demand. Certainly if the results he has secured can be maintained, there is no reason to decry the attempt to produce something new, for in this case, as with the Brighton and Diamond grape, there is marked improvement in the seedlings.

Below are given Mr. Moore's descriptions of the seedlings, the numbers in each case being taken for this occasion only. We find the samples bearing out the descriptions to the letter. In Nos. 230, 260 and 450, Mr. Moore has rich, mild, large and evidently prolific currants, in richness especially surpassing the Cherry. In No. 180 he has a very solid, large, rich currant, which will prove especially desirable because of its shipping qualities. The "quality currant" is well designated. It does not run as large as most of the other samples, but its quality is excellent. It is mild and very rich. No. 120 is also of excellent flavor. Nos. 250 and 300 are with No. 120, more acid than the other samples, yet less acid than the Cherry.

Following are the descriptions of the samples:

No. 180—From seed of Cherry by White Grape currant. The giant of my collection—mild and meaty. Will carry well on account of its solidity. A vigorous grower and has always outcropped the Cherry currant grown alongside with the same treatment. Ripens medium season. The plant has great vigor and yields abundantly.

No. 120—From Cherry currant by W. G. currant. One of the largest varieties in my collection. Large both in bunch and berry and less acid and better flavored than Cherry. The bush is vigorous and has shown greater productions than Cherry.

No. 230—From Cherry currant fertilized by White Grape currant. Plant has great vigor and bears abundantly, the fruit hanging in masses around the branches. Rich and sugary when ripe, but ripens late.

No. 250—From Cherry by White Grape currant. Clusters long-necked and berries large. Quality less acid than Cherry currant. The bush is a vigorous grower and has borne well for the last two years.

No. 260—From seed of White Grape fertilized by Cherry currant. A stocky grower holding its fruit clear from the ground, no matter how heavily loaded. Grows and bears moderately at first, but increases in vigor and productiveness with age, until finally it bears large crops. Flavor tart but rich. Blooms late and ripens late.

No. 300—From seed of Cherry currant fertilized by White Grape currant. Excellent quality, a good grower and abundant bearer. Ripens early.

No. 450—From seed of cherry fertilized by White Grape currant. A vigorous grower and abundant bearer. Clusters usually long-necked, berries large, of excellent flavor.

Quality Currant—From seed of White Grape by Cherry currant. Forms a larger bush than Cherry currant; more productive. The quality speaks for itself.

Cherry Currant—Grown about five feet from No. 180 with same cultivation and enrichment.

Mr. Moore was awarded a diploma for his collection of currants displayed at the World's Fair.

As noted from a late report of the secretary of agriculture of Kansas the number of fruit trees in bearing is 13,690,494 and of those planted, but too young to bear, 8,106,424. Of these there are 12,408,050 apple, 6,029,630 peach, and 1,877,256 cherry trees—indicating that fruit raising is an industry by no means overlooked. There are also 39,309 acres planted in nurseries and small fruits. Of artificial forest there are 215,201 acres of trees over one year old.

Among Growers and Dealers.

A. M. Nicholson of Orlando, Fla., is no longer in nursery business.

David Thatcher & Co., Oskaloosa, Ia., have gone out of business.

A. S. Rollo, Caldwell, Idaho, reports an active nursery business in his county.

W. D. Boynton, of Shiocton, Wis., has started a branch business at Claremont, Va.

C. M. Stark of Stark Brothers Louisiana, Mo., is visiting their orchard interests in Colorado.

The Utah Nursery Co. has set out 50 acres in ten-acre fruit tracts, each a complete orchard.

William E. Rossney, president of the Bloomington Phœnix Nursery, visited relatives in Rochester last month.

Chas. W. Greene, Eddy, N. M., of Pecos Valley fame, visited Stark Brothers Nurseries & Orchard Co., in the latter part of June.

E W. Wiesendanger, Comanche, Tex., informs us that a Missouri firm offers to deliver $25,000 worth of trees this fall on 10 years' time.

Mr. Berkhan, of the firm of Berkhan & Otgen, importers and exporters, New York, representing French nursery interests, is making his western tour.

Among the exhibitors at the florists' convention were Storrs & Harrison, Painesville, O.; Ellwanger & Barry, Rochester; C. H. Joosten, New York City; A. Blanc, Philadelphia.

Edmund Williams, a nurseryman for 30 years, died recently at his home in Montclair, N. J. He was the originator of the Montclair raspberry and an authority on grape culture.

E. Albertson of Albertson & Hobbs, Bridgeport, Ind., visited nurseries in Western New York last month. This was his second trip to the East this summer, the first being at the time of the convention.

Ernest G. Lodeman, Prof. L. H. Bailey's assistant in the horticultural department of Cornell University, is in Europe investigating the diseases of grapes in the vineyards of the Rhine. He will return about the middle of this month.

The Herrick Seed Company of this city has recently been incorporated, with Rufus L. Herrick president; Robert C. Brown, treasurer, and Charles J. Brown secretary. The company has seed farms in Rochester and at Ridgeville, Canada. Mr. Herrick has had 19 years' experience as a nurseryman, and the Messrs. Brown are well-known nurserymen of enterprise and ability.

Subscribe for THE NATIONAL NURSERYMAN.

NEW FRUITS.

W. A. Holton, of Hamilton, Ont., sent us recently samples of a seedling plum which ripened in Canada on August 1st. He has had this plum in bearing five years. It much resembles the Reine Claude de Bavay. Its early ripening quality should make it a decided acquisition. It is very juicy and of excellent flavor.

A new aspirant for favor in the raspberry line is the Miller red Samples received from Myer & Son, Bridgeville, Del., show it to be a firm berry, well adapted to market purposes. The first picking was on June 11th, the last on August 3d.

John S. Kerr, Sherman, Tex., sends a sample of a Texas seedling pear, which he has named Alamo. The sample is from a tree which bloomed late, with the apple, and is full of fruit, the fourth consecutive crop from an eight-year-old tree. This pear is believed to be of great promise for the South and West, because it does not start growth and bloom until after danger from frosts is past. Nearly all other pears in the South bloom too early. The sample is of the color, shape and flavor of the Bartlett. The tree is said to be hardy, free from disease and prolific.

Luther Burbank, Santa Rosa, Cal., sends us samples of the new cross-bred Japan plum, Wickson, and a seedling Japan plum, "J." Each shows the remarkable results which Mr. Burbank is producing. The Wickson is the result of crossing the Japanese Satsuma and the Kelsey. The fruit is the shape of a pear, the stem being where the eye of the pear is found. The smaller end is much like that of an apricot or peach in form. The new plum is of a rich claret color when ripe. The flesh is juicy and of delicious flavor; the pit small. The "J" is smaller than the other, of a greenish hue. The flavor is pleasant. The Japan plums are certainly the coming fruit.

Professor Troup writes that the Russian varieties of orchard fruits which have been tried during the last ten years in Indiana have proved successful in point of hardiness. The trees are nearly all good growers, and many of them are uncommonly good producers and they begin to yield while very young. The apples, however, are nearly all summer and autumn varieties, none of them having proved late-winter keepers. Those which are described as "late-winter" in Iowa ripen in Indiana in August. When crossed with our native varieties, however, they may prove of value. The Pear-trees seem very healthy, and none of them show a tendency to blight, but they have not been in bearing long enough to warrant positive judgment upon them. The variety known as Sapieganka produces small but very handsome pears, which, if picked at the proper time and ripened up, are of very good quality. The Russian cherries so far tested have not proved an any way superior to the old kinds in cultivation.—*Gvrden and Forest.*

CHARLES S. CURTICE.

Charles S. Curtice of Portland, N. Y., was born at Webster, Monroe County, N. Y., and his first nursery experience was gained with George A. Stone, of Rochester, N. Y. In 1880 he began the nursery business for himself, starting in a very small way, at Portland, growing exclusively grape vines and small fruit plants. The business rapidly increased and in 1891 he organized the C. S. Curtice Company with a paid up capital of $40,000, retaining a majority of the stock, the balance being taken by local capitalists. The firm has built up an immense business in this particular line reaching to every state and territory and even foreign countries. It is safe to say that in the nursery trade no firm stands higher or enjoys the confidence of its customers to a greater degree. The annual planting is about 100 acres. The firm is well equipped with commodious offices, storage cellars and all necessary conveniences for conducting the business. Mr. Curtice in addition to his nursery interests, is quite largely interested in grape growing. He is a prominent Free Mason and an active worker in everything he undertakes. He is well known in Rochester where he is a frequent visitor. Mr. Curtice is one of the most popular of the many popular young men in the business.



CHARLES S. CURTICE.

At the recent Spokane convention it was suggested that an orchard might take the place of a life-insurance policy. Comparing it to a paid-up policy on which $100 or more is paid yearly, a speaker said this sum might be put into an orchard. Every year the money value would double many times, and in a few years there would be returns. In ten years one would have a $20,000 orchard with $5,000 net income.

Mr. Booksin, of Santa Clara County, Cal., is quoted as saying: "This year I received a check for $25,000 for the fruit product of 80 acres of land divided up as follows: $11,800 for the fruit from 29 acres of prunes; $3,200 for the crop from 6 acres of cherries and the balance of the $25,000 for the rest of the 80 acres of assorted fruit. I was offered $1,200 per acre for my 80 acres, but I don't want to sell it that cheap."

THE GREEN MOUNTAIN GRAPE.

The frontispiece of this issue represents a bearing vine five years old, in the vineyard of Stephen Hoyt's Sons, New Canaan, Conn. It is from the *American Agriculturist.* Each year's test more emphatically demonstrates its merits as the leading early white grape. The quality is delicious, the bunches nicely shouldered and very handsome and the productiveness and hardiness of the vine are remarkable. The present season, throughout Southern Connecticut especially, is one which has proven most unfavorable for grapes. The blossoms were blighted just as they came into bloom, causing almost a total failure of fruit. The Green Mountain for some reason escaped almost entirely this blight. The vines are loaded with fruit, while the Eaton, Colerain, Moore's Diamond and Jewell, growing on the same trellis and with the same care, are almost a total failure. The vine is a very strong grower, and resists mildew and other diseases to a remarkable degree. Its earliness, together with its vigor of growth and superb quality, makes it a grape especially adapted for planting in northern localiiest, where later varieties seldom, if ever, ripen, while it is equally desirable for planting anywhere where the grape grows and flourishes. The Messrs. Hoyt cordially invite any nurseryman, dealer in trees or vineyardist, or others interested in grapes, to visit their vineyard and see the Green Mountain grape as grown in their unfavorable grape soil. The last week in August or first week in September will find the fruit in good eating condition.

At the recent meeting of the Florida Horticultural Society, the fruit committee called attention to a formidable rival of Florida which was much nearer than California; this was the coast-region of Texas, where an area equal to the entire peninsula could be utilized for growing subtropical fruits. During the last twenty-five pears the progress of fruit-growing in both these states had been so rapid, and they had so many interests in common, that it was proposed to hold a joint meeting of Texas and Florida horticulturists to devise the best means of uniting for mutual benefit.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLSHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., SEPTEMBER, 1894.

EFFECT OF SPRAYING NURSERY STOCK.

During the last few years the attention of horticulturists generally has been called to the results obtained by the more progressive in the matter of spraying fruit trees for the prevention of damage by fungi and insects. So pronounced have been those results that the practice of spraying has become general.

While in many cases the practice was carried to the nursery rows, there has been a tendency to leave this preventive measure to the planter, the orchardist who has to deal with the tree after it has started well upon its life-work. But the importance of the subject, emphasized by actual conditions in the nursery, has led to a belief that greater profit, if not prevention from actual loss, must prompt the nurseryman to apply these remedial measures to his charges before they have graduated from the soil in which they were budded. And it is to Professor B. T. Galloway, of the U. S. Department of Agriculture, that the nurserymen of the country are indebted for the results of experiments recently conducted in their interest and admirably set forth in a special bulletin, No. 7, just issued. It is one of the most interesting to the nurseryman of all the valuable publications of the department. For this reason we have quoted freely from its pages in another column. The experiments conducted by Professor Galloway clearly prove that spraying nursery stock with fungicides is thoroughly practicable ; that it results in better trees in every way, and that it yields a handsome profit.

The experiments also are of interest as showing the comparative value of French and Japan stocks and different buds under the conditions noted.

A valuable experiment was that undertaken for the purpose of determining the effect of spraying with Bordeaux mixture on the growth of Japan and French pear seedlings.

The value of the Bordeaux mixture as compared with other fungicides was another point demonstrated.

ONE REMEDY FOR PRICES.

Said a prominent nurseryman the other day: " In my opinion what is needed to restore prices and confidence in the nursery business is that growers should resolve to burn all poor stock, selling only the best. And by poor stock I mean all that is not strictly first class. Then sell at a rate which will cover the losses and leave a proper margin, a rate considerably higher than the present rate. What would I do with the small growers many of whom make no pretention to have the best stock? The small growers, I say, will have to come to the same terms or stop growing. The public is rapidly coming to learn that it does not pay to purchase poor stock or cheap stock. We should impress upon purchasers the necessity of buying the best stock that they may be more than pleased instead of disappointed at fruiting time."

While objections will be raised to all plans for restoring prices, it is nevertheless of interest to obtain the views of men who have passed through varied stages of the business and whose experience should count for something.

SOCIETY OF AMERICAN FLORISTS.

The tenth annual meeting of the Society of American Florists was held at Atlantic City, N. J., on August 21-23. President J. T. Anthony, of Chicago, in his annual address referred to the rapid advancement in ornamental horticulture since the organization of the society. The development of the chrysanthemum, the carnation and the rose was particularly noted. President Anthony said it was highly important that the society should have a national charter.

"The future relation between this society and the chrysanthemum, carnation and rose societies should receive our serious consideration at this time," said President Anthony. " That the chrysanthemum and carnation societies have done much good by imparting useful knowledge in the culture of their special favorites we all know, but could not this work be as well done by a section of this society as by a separate organization, on the principle that in union there is strength ? I think the work of all the societies could be much better done by the Society of American Florists. It would certainly be more convenient to have one secretary's office for all the societies than to have them scattered as they are now."

PRESIDENT HALE'S BIG ORCHARDS.

Editor of THE NATIONAL NURSERYMAN :

Arriving here after traveling about the country for some time, I find both July and August issues of your paper. I think you do up the Niagara convention in most excellent shape. The picture of your homely servant is a better job than nature made ; but I will excuse you this time. In the August number Brother Albaugh is smiling and happy as ever, and well he may be, for his great orchards down here are in superb shape and there's millions in it, when the first great crop comes next year. My own orchard of 100,000 trees, on 600 acres, I had not seen for some months, and I am astonished at the growth. Last season, when driving along any of the avenues, I could stand up on the buggy seat and take in the whole orchard at one view. Now I can only bump my eye up against the first big tree and stop there. But we are planning for big packing sheds, which shall have a good roomy tower on top ; then again can I see the orchard. Until then I must rest satisfied with what can be seen along the 17 miles of streets and avenues we have laid out through it. Just now we are planning for a new saw mill. Superintendent Molumphy has convinced me that it will take close on to 100,000 feet of lumber to box what nursery stock he has grown this year, and, as he plans for still more next year, it is cheaper to saw our own lumber than to buy it, especially as we have an abundance of pine timber right at hand.

Japan plums, peaches and Marianna plum stocks for the wholesale trade have been our leaders, but local trade is demanding much more each year ; and some are branching out almost against my will, for really I came South only to develop the orchard business, but when I see how much better and cheaper some classes of stock can be grown here, I am inclined to think there is a great future for the nursery business of the South. Rich, fertile land at $10 to $20 per acre, good labor at 50 cents per day, and a working season of 12 months each year are important factors in the problem. Five years ago there was only one nursery within 30 miles of Fort Valley. Now there are 7, with at least 300,000,000 trees for sale this season. Garber and Kieffer pears are now nearly all sold out for local planting and many more will be wanted. We have an order for between 30,000 and 40,000 peach trees for one orchard, and have been asked for figures on lots of trees for orchards 10,000 to 50,000 trees in extent, which indicates something of the scale planting is going on all over Georgia, Alabama and South Carolina. Owing to a lighter supply in some sections, Kieffer pear, Marianna plum stock and peach trees have advanced in price. My best information is that the supply of Marianna plums South is not over one-half that of '92 and '93, while local demand is greater. Of Japan plums, Satsuma is being most largely planted. There has been rather too much rain all through the South this season, but on the whole it has not injured crops, and corn and cotton are better than ever known before. The South is on the high road to prosperity this season "shoo nuff"; the only thing to hinder may be the low price of cotton. I go from here to Huntsville and thence home via the nursery district of Tennessee, Ohio and New York.

J. H. HALE.

FORT VALLEY, Ga.

THE government crop report for August states that a further decline of nearly four points is noted in the average condition of apples, aggravated by drought in many sections. The condition of peaches had fallen to 22.3. The condition of grapes, while higher than that of apples and peaches, is lower than the August return for any year since 1890. In July the condition was low also, and, generally, there has not been great loss in the thirty days since that report.

THE tariff bill has become a law. In the free list is this paragraph : "Plants, trees, shrubs and vines of all kinds commonly known as nursery stock." Now let Canada reciprocate.

IN VARIOUS STATES.

Oklahoma will have less refused nursery stock this fall ; not because deliveries for cash will be much better, but on account of less reckless business. In November last, "mountains" of undelivered stock witnessed the universal slaughter of profits that had taken place. Failure of crops in Western Kansas had compelled firms, usually operating in that territory, to concentrate in Oklahoma. All were badly burned. This year operations have been limited, crops good and results will be better. But there is already a movement for spring business that indicates how easily some forget even very severe lessons.

Arkansas City, Kan., real estate men have their hooks baited for the unsuspecting. Several nursery firms are being induced to believe that there is business enough in the "Strip" to open branch nursery establishments in their border city. It is hoped not many will be "hooked" and "landed."

Texas is generally a good fall delivery state. Cotton is not yet out of danger, and sales to good planters for cash move more slowly than last year. Around Dallas the nursery business is greatly demoralized, the result of undelivered stock last fall.

In Kansas, save in some western counties, especially Cheyenne and adjoining territory, crops are fairly good. Little business has been done because the wheat acreage was limited and corn is always uncertain until too late

for fall delivery. In Eastern Kansas business is hard to get, but stock always delivers well.

In Nebraska and Southern Missouri the tendency is to buy in orchard quantities. In Red Cloud, Neb., region, one orchard center has nearly 200,000 trees. In Howell and other Missouri counties still larger plantings are taking place. Northern Missouri has a better spring than fall trade.

Illinois business has been badly hurt by extensive strikes. Drouth also threatened in latter part of June, but copious rains about the 28th of that month gave assurance of the best crop that state has had in 20 years. Good sales can always be made in Illinois.

In all these states nursery plantings, with few exceptions, are less than previous years. The prices are stiffening up and the demand is for better stock. Large nurseries which can show successful orchards of their planting are going to get more and more of the floating trade. Farmers are beginning to realize that while a tree is a tree, there are differences in fruit trees.

RECENT PUBLICATIONS.

Enclosed in a cover of exceptionally handsome design is the catalogue of the Fruitland Nurseries, Augusta, Ga., of which P. J Berckmans is proprietor. These nurseries are foremost among those of the country, and the arrangement of the catalogue is excellent.

"Northwestern Pomology," by C. W. Gurney, published by the author at Concord, Neb., is one of the most valuable of the recent publications in the interest of horticulture. Its chief feature is that it treats of pomology in a certain section, and that section is the great Northwest, whose resources are but just being fully appreciated. Mr. Gurney has had 28 years' experience as a nurseryman and orchardist, and, as he observes in his preface, in so long a period of hard work, study and observation, even a very ordinary person should have acquired much information. The subject of the book is treated in an able manner under the following heads: "The Nursery," "Hardiness of the Tree," "Making and Managing the Orchard," "Pruning in General," "Cross-pollenizing the Flowers," "Enemies of the Orchard and Fruit Garden," "Propagation," "Landscape Gardening," "Plums, Peaches, Apricots, Cherries, Small Fruits, Grapes, Apples, Pears, Evergreens," "Humbugs." The book treats of subjects in which all nurserymen are interested.

The issue of August 16th of the *American Florist* was the convention number. In addition to matter concerning the convention that issue contained articles on progress in growing roses, carnations, chrysanthemums, cannas and geraniums.

Recent publications of the U. S. Department of Agriculture include "Spraying Fruits for Insect Pests and Fungous Diseases," "The Effect of Spraying with Fungicides on the Growth of Nursery Stock," "The Army Worm," "Important Insecticides," "Experiment Station Record, Vol. V., No. 11," "Report of the Statistician."

The third biennial report of the Kansas State Horticultural Society for the years 1891-93, has been issued under the direction of the secretary, G. C. Brackett, Lawrence, Kan. It is an interesting volume of 232 pages containing the proceedings of the meetings of the three years named. There is a list of officers and members and standing committees for 1894, a compilation of the state laws relating to horticulture, life sketches and notices of deceased members and an appendix giving a manual of Kansas fruit, departments of fungi and entomology, county fruit reports, horticultural statistics, and a voted fruit list for Kansas. The standing committee on novelties in the nursery trade is composed of E. J. Holman, Leavenworth; A. C. Griesa, Lawrence, and U. B. Pearsall, Fort Scott. The report is a valuable compendium of Kansas horticulture, and there is in addition much information of a general nature. The state may well be proud of this proof of the efficiency of its horticultural society.

The catalogue of the Fancher Creek Nursery, near Fresno, Cal., deserves special mention, because of the intelligent manner in which it has been prepared. It indicates a complete assortment of a wide variety of nursery stock. It is handsomely illustrated. There is evidence that the nursery is producing one of the largest and best assorted stocks of fruit and ornamental trees on the Pacific coast. George C. Roeding is the manager.

Horticulturists of Minnesota obtain the full benefit of the results shown at the state experiment stations through the summaries published in the *Minnesota Horticulturist.*

Part thirteen of "The Book of the Fair" contains the concluding portion of an interesting description of the department of mines and mining and the opening of chapter seventeen on the fisheries of the world. There is an unusually large number of full page illustrations in the same excellent manner. Chicago: The Bancroft Company.

FROM A FIRM ESTABLISHED IN 1800

F. JAMES, USSY, FRANCE.—"Enclosed please find a post office order for $2.50, in order to receive THE NATIONAL NURSERYMAN two years, beginning in June 1894. Please forward the numbers of June, July and August not received this year as I forgot to send you the subscription. I forgot, indeed, for it is the most interesting newspaper I have ever seen in its specialty."

FOR AND AGAINST PRUNUS SIMONII.

The prunus simonii, which fruited in Colorado last season for the first time, has proved a great success out in Utah says *Field and Farm.* As far north as Ogden we once saw the trees of prunus simonii loaded down with ripening fruit and the specimens usually were as large as Jonathan apples. This stranger from Japan will no doubt prove a grand variety on our western slope.

Prunus Simonii, says the Iowa *Homestead*, has been under test for twelve years and has found no place among fruits that would recommend its being planted in either a home collection of fruits, or commercial planting of any kind. It rarely ever fruits and the blossoms are very faulty and will not fertilize perfectly. Occasionally trees will set fruit. It is peculiar in shape, having the form and color of a small tomato, being somewhat flat and sutured a number of times. The flavor of the fruit is insipid and of little value, not equaling any of the standard western plums that are in cultivation. The experiment stations have generally discarded it after testing them. Tree peddlers, however, are selling the trees at $10 a dozen in certain western localities, describing the fruit as a cross between the apricot and the peach, and uninformed farmers are beguiled into buying.

GOOSEBERRY CULTURE.

A correspondent asks us for facts regarding gooseberry culture. A correspondent at Clinton, N. Y., writes *Garden and Forest:* The greatly increased demand for this fruit is even more noticeable this year than it was during the two previous seasons, and it is of growing importance that we should be able to raise fine gooseberries without mildew or other loss. I have for the last ten years had no trouble either with the native or the foreign varieties of this fruit. Formerly I was much troubled with mildew. My plan now is to grow on high well-drained soil, in rows running north and south, and well open to the sun. There is no danger from shade if the land be open and well-drained. The plants should be in rows, easily cultivated with a horse, and the soil often stirred in the spring. I do not think it pays us to grow the natives like Downing and Houghton and Smith, so long as we can just as well grow the larger sorts. Industry has never done well with me, but others report that it is prolific. Crown Bob and Whitesmith are two of the best of foreign parentage. But better yet is an old sort we have had for sixty years, and known only as the "Irish Gooseberry." The earliest and richest I have is a wilding which resembles the foreign sorts in bush, but has a fruit like Houghton in color, but much lighter red. It bears abundantly, and is ripe about the first of July. It is evidently a cross between the foreign and native species. Columbus and Red Jacket, I think, are emphatically valuable introductions. There is room for a new race of cross-bred gooseberries.

LATEST RECEIPT FOR BORDEAUX MIXTURE.

Professor Beach of the state experiment station at Geneva, N. Y., gives the following advice regarding Bordeaux mixture: Dissolve 4 pounds of copper sulphate in water, nearly filling a 45 gallon cask. Next make a whitewash or cream of freshly slacked lime. Have on hand a small bottle containing a saturated solution of yellow prussiate of potash (ferro- cyanide of potatassium) in water. As you add the lime to the copper sulphate water, apply the test from time to time by adding a drop from the small bottle. As long as you notice a change of color in the mixture, more lime must be added. When further addition of the drug ceases to change the color, the mixture contains lime enough. The necessity of straining can be avoided by using only the clear milk of lime, not the settlings. Freshly slacked lime is always to be preferred. It sticks better, and it does not take so much time. Its object is simply to neutralize the acid in the sulphate. The mixture must be constantly stirred while being applied. For close work there is no better spraying nozzle than the Vermorel. A bamboo extension may be used with which to get the nozzle into the tree. A weak mixture put on thoroughly is better than a strong mixture applied in a haphazard way. Experiments have shown the Bordeaux mixture to be the best fungicide yet tested."

CATALOGUES RECEIVED.—C. H. Joosten, New York City, special, wholesale, bulbs and plants; Lenault-Huet, Ussy, France, per C. H. Joosten, fruit tree stocks and forest trees; Peter Van Velsen & Sons, Houtwaart, Overeen near Haarlem, Holland, bulbs; Koster & Co., Boskoop, Holland, nursery stock; G. C. Van Meenwen & Sons, Harlem, Holland, bulbs; The Horticultural Company, Boskoop, Holland, per L. C. Bobbink, Hoboken, N. J.; John Laing & Sons, London, England, special, caladiums; E. W. Reid, Bridgeport, O., general fruits and flowers; Henry A. Dreer, Philadelphia, seeds, plants and bulbs; J. J. Grullemans & Son, Noordwÿk, Holland, Dutch bulbs and flower-roots; John Palmer & Son, Arman, Scotland, nursery stock; E. Y. Teas, Irvington, Ind., trees and shrubs; Rogers Nursery Co., Moorestown, N. J., trees and shrubs; The Farmers' Nursery Co., Tadmor, O., Greenville strawberry and Crosby peach.

Ellwanger & Barry are meeting with much success in the introduction of the new rose "Crimson Rambler." This rose received gold medals from the National Rose Society of England, and the National Horticultural Society of France, the International Horticultural Exposition at Earl's Court, as well as numerous first-class certificates. A lithograph of the rose is presented in this issue.

I. D. CARTRIGHT, TOLEDO, O.—"June and July numberf received and appreciated. Am taking more papers than I have time to reac, but I like the two numbers received so well that I enclose you one dollar, subscription for one year."

N·O·T·I·C·E

Is hereby given that we are ready to quote "hard times" prices . . . . on . . . .

Apple. Lowest prices ever quoted. Below "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for cherry. Get our prices. . . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Gooseberries. Downing and Industry, very fine 2-years', first-class. Scarce. Order early. . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

SMALL FRUIT PLANTS

OF EVERY VARIETY.

Strawberries, Raspberries, Blackberries, Gooseberries, Currants.

SPECIALTIES:

EUREKA AND SHAFFER'S COLOSSAL RASPBERRY, NORTH STAR CURRANT, TIMBRELL, GREENVILLE, MUSKINGUM AND BEDERWOOD STRAWBERRY.

All Stock Guaranteed First-class and True to Name.

P. D. BERRY,

Box 412. **DAYTON, OHIO.**

Hardy Shrubs

AT HALF PRICE . .

We wish to give attention entirely to the Fruit Department and now offer our Ornamental Stock at prices some distance below **"ROCK BOTTOM."**

TRADE LIST NOW READY.

Fine Stock Japan Plums, Peach Trees, Grafted Nuts, Strawberries and Asparagus.

Large Stock of HEAVY KIEFFERS. Write us what you want.

The Rogers Nursery Co.,
Moorestown, N.J.

N. H. ALBAUGH, Pres't. F. G. WITHOFT, Vice-Pres't.

The Albaugh Nursery and Orchard Co.,

Headquarters for

BUDDED AND WHOLE ROOT GRAFTED **Apples, Cherries, Plums.**

AND A GENERAL ASSORTMENT OF NURSERY STOCK.

500,000 First-class Peach Trees for Fall 1894, of all the new and valuable varieties.

1,500,000 Marianna Plum stock for Fall 1894,

AT LOWEST RATES.

☞We took first premium on Diamond (trade mark) Peach at World's Fair.

The Albaugh Nursery and Orchard Co., TADMOR, OHIO.

GILBERT COSTICH,
Rochester, N. Y.

For Fall, '94, and Spring, '95:

STD. AND DWF. PEAR, APPLE, PLUM, CHERRY, APRICOTS, SHRUBS, EVERGREENS AND ORNAMENTAL TREES.

Lowest Price Given on Application. **GILBERT COSTICH, Rochester, N. Y.**

I Am Offering to the Trade:

2 Yr. PLUM ON PLUM. 2 and 3 Yr. APPLES—Budded. 2 and 3 Yr. CHERRY—Sweet and Sour. 3 Yr. STANDARD PEARS. 2 Yr. DWARF PEARS.

The finest stock grown in this country. Orders for Car Load Lots solicited. Let me price your want list.

F. M. Hartman, Dansville, N.Y.

APPLE SEEDLINGS.

Write for Prices.

Can supply all grades in **Straight** or **Branched Roots**, as wanted. Grades and quality unsurpassed. No disease or insects guaranteed. Plants are grown on new, rich upland prairie. Address, **J. A. GAGE, Fairbury, Neb.**



SCARLET MAPLES, 9 to 10 ft.; **NORWAY MAPLES**, 9, 10 and 12 ft.; **CAROLINA POPLARS**, 5 to 18 feet; **PEACH TREES**, including Ellison and Elberta; also **ASPARAGUS ROOTS**, 2 yrs., Barr's Mammoth and Conover's Colossal; **NORWAY SPRUCE**, 1½ and 3 ft., all fine bushy, on rented grounds. Prices low and must be moved this fall, or early next spring.

JOSIAH A. ROBERTS, Malvern, Chester Co., Pa.

Transon ∴ Bros., ∴ Nurseries,

Barbier Bros. & Son, Successors,

16 Route d'Olivet, - - Orelans, France.

HAVING this year a very large quantity of **Fruit** and **Forest Tree Stock, Young Ornamental Shrubs and Coniferous Seedlings, etc.**, of the best quality for sale, a preliminary list giving the lowest prices of these various stocks will be sent to our American customers.

This list will appear by the 1st of Augusf, and may, on application, be obtained on or after that date, free of charge, from our agents, **Messrs. Knauth, Nachod & Kuhne, 13 William St., New York.**

FAIRMOUNT NURSERIES,

TROY, OHIO.

We have in surplus for this fall's trade a fine assortment of

APPLES,
PEARS,
CHERRIES,
PLUMS,
APRICOTS.

DOWNING AND HOUGHTON GOOSEBERRIES,
MAGNOLIA ACUMINATA,
A FULL LINE OF
EVERGREENS AND
ORNAMENTALS.

—ALSO—

APPLE SEEDLINGS,

Send List of Wants.

CLOSE PRICES. CHOICE STOCK.

GEO. PETERS & CO.,

Troy, Ohio.

APPLE TREES 2 and 3 years old, 3-4 in. and up, 5 to 7 feet.

And all the lighter grades to offer for the Fall delivery of 1894 and Spring of 1895, at prices that cannot be beat. F. O. B. in car lots from any of the following points: Lee's Summit, Mo.; St. Joe, Mo,; Council Bluffs, Ia. and Sandwich, Ills.

Correspondence will be promptly answered from any of the above named points.

We are always in front in the race for the disposition of Apple Seedlings and Foreign Fruit Tree Stocks.

H. C. GRAVES & SONS,

Lee's Summit, Mo.

The North Star Currant.

THE BEST GROWER . . . . .
THE BEST FRUITER. . . . .
THE BEST SELLER . . . .
THE BEST RED CURRANT

ON EARTH TO-DAY.

The "NORTH STAR CURRANT" is a rapid grower, a very prolific bearer of large fruit, of a sweet, delicious flavor, and yields a *sure crop* every year. The fruit does not shell or drop off nor does it scald. "THE NORTH STAR CURRANT" has more strong selling points, backed by genuine merit, than any other specialty on the market to-day.

IF YOU WANT something new that will secure orders *with good margins*, try the "NORTH STAR." For full information and reduced prices, write the introducers.

The Jewell Nursery Co.

LAKE CITY, MINN.

R. H. BLAIR & CO.,

Office Northwest Corner 11th and Walnut Sts., . . . Kansas City, Mo. . . .

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail,

STRICTLY NO. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM, ...

Roses, Ornamental and Shade Trees. Prices low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

PITTSFORD NURSERIES.

WALES M. NYE.
C. BURTON NYE.

We make a specialty of all the leading varieties of

STANDARD APPLES and PEACHES.

Also offer Pear, Plum, Cherry and Quinces.

Write and get our prices. WALES M. NYE & BRO.,

PITTSFORD, N. Y.

OUR FOREST TREES.

We supply these directly to **NURSERYMEN AND DEALERS.** Fine, well-rooted Seedlings, 1 to 4 ft. Magnolia, White Fringe, Pawpaw, Tulip Tree, Sweet Gum, Sherwood, Dogwood, Beech, and also Tecomo or Trumpet Vine. Send for our circular and price list and see who are among our best customers. **C. BOGGS, Cheswold, Del.**

300,000 PEACH TREES,

50 Varieties.

BUDS NOW READY.

WRITE AND GET MY PRICES. J. G. Harrison & Sons.

BERLIN NURSERIES, BERLIN, MD.

APPLE SEEDLINGS.

(Wholesale Trade Only.)

We grew and sold **4,800,000** during the past season. We belong to no combine and will gladly quote prices on any amount at any time. We have also fine stock of

APPLE TREES, 1 and 2 years.
KEIFFER PEARS, 1 and 2 years.
CHERRY, 1 and 2 years.
PLUM, 1 year.

— AND —

French Pear Seedlings.

PRICES ON APPLICATION.

F. W. Watson & Company,

TOPEKA, KAN.

PEACH TREES.

THESE have been a leading feature in our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varieties known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BRO. & THOMAS,

Maple Avenue Nurseries, West Chester, Pa.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ. 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, Chester Co., Pa.

When writing to advertisers mention The National Nurseryman.

WOODLAWN NURSERIES,

ROCHESTER, N. Y.

ALLEN L. WOOD, PROP.

Wholesale Only. **No Agents.**

Grower of

SMALL FRUIT PLANTS.

We offer for the Fall of '94 and Spring of '95, the largest and most complete collection in the United States of high grade small Fruit Plants for Nurserymen and Dealers. Special attention is directed to the following Raspberries in large quantities:

50,000 Cuthberts, Transplants.
30,000 Carolina, "
75,000 Golden Queen, "

also Brandywine, Brinckle Orange, Herstine, Marlboro, Rancocas, Thompson's Early Prolific in transplants. Also an immense lot Doolittle, Gregg, Johnson's Sweet, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's Colossal and Tyler, of extra heavy tips for Fall.

Blackberries, 100,000 Snyder, root cuttings.

Also a large lot of Agawam, Ancient Briton, Early Harvest, Erie, Eldorado, Kittatinny, Lawton, Lucretia Dewberry, Minnewaska, Taylor, Wachusett, Wilson Early and Wilson Jr.

Currants, 50,000 Fay's Pro., 2 yrs.
25,000 White Grape, 2 yrs., extra fine plants.

Also 400,000 of extra fine 1 year plants of the following: Blk. Naples, Cherry, Blk. Champion, Red Dutch, Fay's Pro., La Versailles, North Star, Lee's Pro. and White Grape.

Gooseberries, Downing, 2 yrs., extra fine plants.

Also Golden Pro. (Pearl New,) Red Jacket, Smith's Imp., Triumph and Chautauqua.

Strawberries, Eight Acres.

Millions of Plants for early Fall trade. Headquarters for the great Greenville Strawberry. Testimonials from California to the Atlantic, from Maine to Texas. The best Strawberry that has been sent out since the Wilson Albany. Send your orders to me and get them True to Name. I also have all of the other leading kinds.

Asparagus, 2 year Roots.

Millions of the following varieties: Conover's Colossal, Palmetto and Elmira.

Rhubarb, 100,000 Myatt and Victoria,

Extra fine plants. Also large stock 2 yrs. Grape Vines of all the leading kinds

☞ For miscellaneous stock look at wholesale catalogue for Fall, ready August 1st. Free.

STOCK WANTED.

We need a car load of Dwarf and Standard Pear, also a lot of Ornamental stock, Forest and Apple tree seedlings. . . .

Having a large surplus of Apple, Grape Vines, Cherry, Small fruits and other stock, we would like to effect an exchange for such stock as we need. .

PROPOSITIONS TO FURNISH ALL OR PART WILL BE CONSIDERED.

The Hart Pioneer Nurseries,

. . . . . **FORT SCOTT, KANS.**

BUY THE BEST.

WHITNEY'S IMPROVED

Western Tree Digger.

Manufactured by

N. A. WHITNEY,

Send for Prices. FRANKLIN GROVE, LEE CO., ILL.

When writing to advertisers mention The National Nurseryman.

THE GELHAAR, FLEMING & FULLER
PRINTING CO., Incorporated.

WE WANT
YOUR
PRINTING
CAN WE HAVE IT
?

COOK OPERA HOUSE BUILDING,
ROCHESTER, N. Y.

FRENCH FRUIT TREE STOCKS.

Immense Stock. Large Assortment.

.LENAULT HUET,

Nurseryman at Ussy, Calvados, France,

offers Fruit and Forest Trees, Evergreens, Shrubs, Roses and a general list of Nursery Stocks of finest quality and high grade, with branches at Angers and Orleans. I am enabled to supply any wants of the trade at the most moderate prices. Before purchasing elsewhere send me an estimate of your wants and learn my prices.

Special care given to grading and packing. Satisfaction guaranteed.

Address all orders and enquiries to

C. H. JOOSTEN,

3 Coenties Slip, New York.

WANTED at the proper season, prices and catalogues of Conifer Seeds.

Knox Nurseries,

ESTABLISHED IN 1851.

1,500,000 APPLE TREES, 1, 2 AND 3 YRS. OLD.

Akin Red, Mam. B. Twig and Ark. Black, in large quantities. Also a large stock of Cherry trees and Evergreens. Our trees are as fine as can be grown, and they ripen up earlier than farther West. . . . . .

You will save money by sending us a list of your wants. . . . . .

H. M. SIMPSON CO.,

VINCENNES, IND.

SNOWHILL NURSERIES

NOW OFFER FOR **Fall Delivery, 1894**

PEACH TREES, Fine Growth and Strictly Healthy, one year old from buds, and June Buds, all the most popular varieties, including **CROSBY and CHAMPION.**

Also, **20,000 1-YEAR OLD APPLE,**
2,000 NORWAY MAPLES, 8 to 9 feet,
5,000 CAROLINA POPLARS, 9 to 12 feet.
20,000 1-YEAR OLD GRAPE VINES,
500,000 ASPARAGUS ROOTS, 1 and 2 years old.

TWO MILLION STRAWBERRY PLANTS. *Price List now ready.*

Correspondence solicited. Address,

W. M. PETERS' SONS,

WESLEY P. O., WORCESTER CO., MARYLAND.

200,000 Peach Trees,

STRAWBERRIES, RASPBERRIES, BLACKBERRIES, **AT LOW RATES.**

LADY THOMPSON Strawberry,
MILLER Red Raspberry,
MAXWELL'S EARLY Blackberry,

THE THREE COMING MARKET VARIETIES.

CORRESPONDENCE SOLICITED.

MYER & SON, Bridgeville, Del.

STARK BRO'S

Nurseries and Orchards Co.,

LOUISIANA, MO., ROCKPORT, ILL.

All *fresh* land and the very finest nursery soil. A very large general stock. Fruit trees by the million.

Staples, also many new leaders and favorites, including :

APPLE—Akin, Ark. Black, Babbitt, Jefferis, Kinnaird Choice, Nero, Paragon (Mam. Black Twig, Arkansas), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR—Bessimianka, Garber, Idaho, Koonce, Krull, Japan Golden Russet, Margaret, Pres't Drouard, etc.

CHERRY—Abbesse (Sweet Duke; best grower and hardiest Duke), Bl'k Tartarian, Improved, Cal. Advance, Ida, Montmorency Ord., Ostheimer, Suda Hardy, Windsor, etc,

PLUM—Abundance, Burbank, Clyman, Freestone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Mo. Apricot, Orient, Poole Pride. Tragedy and Golden prunes, World Beater, etc.

PEACH—Gold Dust, Northern Ap't, Sneed, Champion, etc.

APRICOTS—Sunrise, Noonday—new **large** Russians.

CRAB—Florence, Gibb, Richland Sweet, Looker Winter, etc.

GRAPES, GOOSEBERRIES, CURRANTS, BLACKBERRY, RASPBERRY, ORNAMENTAL TREES, EVERGREENS, ROSES, SHRUBS.

Capital Nurseries,

PETERS & SKINNER, Props.

NORTH TOPEKA, KAN.

We will have for fall of '94,

APPLE TREES, 2 and 3 years; KEIFFER PEARS, 1 and 2 years; CHERRY, PEACH AND PLUM TREES.

SEEDLINGS.

APPLE, OSAGE ORANGE, BLACK LOCUST, HONEY LOCUST, RUSSIAN MULBERRY.

PETERS & SKINNER,

Correspondence Solicited. **North Topeka, Kan.**

Kansas Apple Trees,

In Car Lots. None Better.

Ben Davis, Jonathan, Mo. Pippin, Gano, etc., etc. Also Standard and Dwarf Pear, Cherry, Plum and Peach. Largest stock of

CROSBY AND BOKARA PEACHES

in the West. These have stood 22 and 28 degrees below zero and fruited. Buds of all leading sorts for sale. A large stock of the celebrated KANSAS RASPBERRY plants. You will do well to let us hear from you.

A. C. GRIESA & BRO., Props.

Mt. Hope Nurseries, Established 1869. LAWRENCE, KANS.

APPLE SEEDLINGS,

1,000 to Car-Load Lots.

Apple, Pear, Plum and Cherry Trees,

Evergreens and Small Fruits, **Pear Seedlings.**

WHOLESALE PRICE LIST IN AUGUST.

Special Quotations Now. **W. A. WATSON & CO.,**

Normal, Ill.



STECHER LITH CO. ROCH N Y

Ellwanger & Barry
ROCHESTER, N.Y.

"CRIMSON RAMBLER ROSE."

COPYRIGHTED BY
ELLWANGER & BARRY.
1894.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

W. T. HOOD & Co.,

OLD DOMINION NURSERIES.

350 Acres under Cultivation. Richmond, Va.

FOR FALL 1894-SPRING 1895.

A very large stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs, Japan Pear Seedlings.

CELLAR, PACKING SHEDS AND BEST FACILITIES FOR HANDLING STOCK PROMPTLY.

WANTED—**EMPORIA WHOLESALE NURSERIES**—A partner with $2,000 cash wanted, to put into a good paying wholesale nursery in Virginia, in middle belt between North and South.

MY SURPLUS FOR FALL, 1894:

American Arbor Vitæ, 3 to 6 feet; Balsam Fir, 10 to 24 inch; Norway Spruce, 10 to 24 inch; one year old Keiffer and Garber Pears, 4 to 6 feet, strong stock; Houghton Gooseberry; Grandiflore Magnolia Seed; two and three year Concord and Ives Grape Vines, strong plants. Will sell low. Write for prices. I want lowest prices on car apple seedlings. Address, **CHAS. S. LINDLEY, Belfield, Va.**

GEYER BROS.,

ROCHESTER, N. Y.

APPLES, PEARS, PLUMS, PEACHES, CHERRIES, GRAPE VINES. ROSES, &c.

STOCK AT LOWEST WHOLESALE PRICES.

CORRESPONDENCE SOLICITED.

GREENVILLE STRAWBERRY • • •

AND

DOWNING'S WINTER MAIDEN BLUSH APPLE,

Grown and for sale at their

ORIGINAL HOME.

For prices, plates, etc. write to **E. M. BUECHLY,**

Greenville, Ohio.

We Have It: Precipitated Sulphur
You Want It: Schloesing with Nicotine.

Insect Destroyer and Anticryptogamic Powder.

Radically destroys Caterpillar, Larva, Vine Fretters, Aphis and other Parasites of Agriculture, Trees, Vines and Vegetables growing. It rids Cabbage of the Caterpillar of the Pieride, Potatoes of the Doryphora, and cures Tomatoes, Peas, Lettuces, Cabbages, etc., of the Peronospora. It cures the Vine of the Oidium, Mildew, Rots, Anthracnose and other Cryptogamic diseases, destroying at the same time Insects infesting it, such as Pyrales, Altises, Attelabcse, Erimose and Snails. It cleans Fruit Trees of Lanigerous Vine Fretters, of Hermes and the White Caterpillar, also Lucern of the Negril. It will keep away Ants, Grasshoppers, Locusts and Coleopterea. It protects the Vine from Grey Worms, and cures Plants of Chlorose and stimulates vegetation.

Mixing this compound with Manure will destroy Worms, and mixed with seeds, *protects same against attacks of Larva and Insects of all kinds.*

"*This is the most powerful and best Insecticide ever offered to the public.*"

Write us for prices, we want your orders, address all correspondence to

BERKHAN & OTGEN, 39-41 Cortlandt Street, New York,

Sole Agents for United States.

When writing to advertisers mention The National Nurseryman.

Levavasseur & Sons Nurseries,

USSY (Calvados) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

BEST GRADING QUALITY AND PACKING.

Send your List of Wants for Special Prices to

BERKHAN & OTGEN,

39 and 41 Cortland Street, = = New York.

Sole Agents for the United States and Canada.

Orleans Nurseries Co.,

ORLEANS, FRANCE.

Growers of fine Fruit Stocks, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application. . . . ,

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - New York.

H. S. HURD, Nurseryman, Burlington, Ont.

APPLE, PEAR, PLUM, CURRANTS, GRAPES IN LARGE QUANTITIES, AND AT PRICESTO SUIT THE TIMES.

SEND LIST OF WANTS.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

Geneva Nurseries.

YOUNGERS & CO., Props.

. . GENEVA, NEB. . .

WE HAVE A LARGE SURPLUS OF

• SHADE TREES. •

OF THE FOLLOWING SORTS:

SILVER MAPLE,	WHITE ASH,	AMERICAN BIRCH,
CATALPA SPECIOSA,	WHITE ELM,	SYCAMORE,
	CAROLINE POPLAR,	

The above we can furnish 6 to 8 and 8 to 10 feet, in car loads. also Catalpa Speciosa 2 to 3 and 3 to 4 in. stems, Black Locust 6 to 8 and 8 to 10 feet, Balm of Gilead 4 to 5 and 5 to 6 feet, and Wisconsin Willow 5 to 6 and 6 to 8 feet.

We also have a surplus of **BLACK and HONEY LOCUST SEEDLINGS, CATALPA SPECIOSA SEEDLINGS,** and **OSAGE ORANGE HEDGE PLANTS,** all very fine and well graded.

WRITE FOR PRICES. YOUNGERS & CO., Geneva, Neb.

When writing to advertisers mention The National Nurseryman.

Syracuse Nurseries and "Lakeside" Stock Farm.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Plums.

A very fine line of

Ornamental Trees and Shrubs,

suitable for **LAWNS** and **PARKS**, and a very large exceptionally choice list of

Roses.

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

—OUR—

Live Stock Department

Is replete with **HORSES** and **CATTLE** of all ages and both sexes, of the following breeds.

STANDARD BRED,
FRENCH AND AMERICAN COACH,
CLEVELAND BAY,
HACKNEY,
CLYDESDALE,
PERCHERON.

and Driving,-Coach, or Carriage Horses, single or in pairs.

—ALSO—

Holstein Friesian Cattle

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

SMITHS & POWELL CO., Syracuse, N. Y.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

. . BRIGHTON, N. Y. . .

I have to offer for Fall, 1894 and Spring, 1895, the following strictly first-class stock:

75,000 Apple Trees, **25,000 Standard Pears,**
10,000 Dwarf Pears, **15,000 Plum Trees,**
15,000 Cherry Trees, **10,000 Peach Trees.**

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865

ROCHESTER, N. Y.

I Offer for Fall 1894.

Clematis.—Strong plants. Own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh; Crispa; Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.
Honeysuckle.—Hall's Japan, Monthly Fragrant.
Ampelopsis Veitchii. American Ivy.
Japan Snowball.—Strong, fine plants.
Roses, H. P's and Mosses.—Strong plants, own roots and budded.
Tea Roses.—Fine plants, 4 inch pots.
Tree Roses.—Elegant plants. Low price.
Oak-leaf Mt. Ash.—Elegant trees. Low price.
Weeping Mt. Ash.—Fine heads.
Cut-leaf Birch.—8 feet, perfect trees.
Purple Birch.—4 feet, **true purpurea.**
Young's Weeping Birch.—5 feet stems.
Lilac, Weeping Pendula.—5 feet, not budded on lilac.
Hydrangea P. G.—A fine lot of strong plants.
Flowering and Foliage Shrubs.—Fine assortment.
Paeonies.—A grand collection.
Paeonies, Tree.—Nice plants in quantity.
Gooseberries.—In variety; 2 year Plant.
Blackberries.—Strong, nicely trimmed to one cane.
Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry, North Star.
Grape Vines.—A complete assortment.
Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

JOHN PALMER & SON, Ltd.,

Annan Nurseries, - - Dumfriesshire, Scotland,

Have for FALL and SPRING SHIPMENT an IMMENSE STOCK of . .

INDUSTRY GOOSEBERRIES, one, two and three years, carefully selected and well graded.
Whitesmith, Crown Bob, and Lancashire Lad Gooseberries, No. 1 stock.
H. P. and Moss Roses, best sorts, strong and good.
Tree Roses, good bushy heads, good roots.
New Polyantha Rose, "Crimson Rambler," the finest of its class in the world.
New Hybrid Sweet Briers, a sterling novelty.
Clematis Jackmannii, and other most popular varieties, two-years, strong plants.
Rhododendron, hybrid grafted, best and hardiest sorts from one to three feet.
Rhododendron Ponticum, well set with flower buds, all sizes, very cheap.
Manettii and Multiflora Rose Stocks, well rooted.
Norway Maples, 18 to 24 in., two to three and three to four feet. Straight trees, carefully transplanted.
Cut-leaved Weeping Birch, two to three, three to four, and four to five feet.
Mountain Ash, Scotch Larch, Birch and Elms, Beech, Linden, California Privet, Norway Spruce, Austrian and Scotch Pine, Hydrangea Paniculata Grandiflora, and a general line of stock of the best sizes for export.

Lowest Through Rates to all points in the United States and Canada.

Catalogues Free.

Write for prices before ordering elsewhere. Correspondence and early orders solicited.

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots.) Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . . HYBRID ROSES, TEA ROSES, CLIMBING ROSES, MOSS ROSES, AZALIAS, RHODODENDRONS, CLEMATIS, INDUSTRY GOOSEBERRY. . . . . .

Send list of your wants for prices. **W. & T. SMITH CO.**

We will meet all comers on prices on Apple Trees in Car Lots.

APPLE
PEAR
MAHALEB
MYROBOLAN } **SEEDLINGS.**

H. C. GRAVES & SONS, Council Bluffs, Ia.

ESTABLISHED 1852.

Phoenix Nursery Co.,

600 Acres. . .
13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS — Wholesale and Retail.

Correspondence solicited and promptly answered.
Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. . . . **BLOOMINGTON, ILL.**

The SPARTA NURSERIES

Always have in stock their Dry Baled Moss. Same quality in bulk.

The Finest Grade of Strawberry, Rasperry and Blackberry Plants Ever Offered. Write for prices.

Sparta, Wis., Aug. 1, 1894. . . **Z. K. JEWETT & CO.**

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON.

Write me for easy terms and prices. TOMAH, WIS.

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,
ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR
UNITED STATES AND CANADA.

ANDRE L. CAUSSE,

105 and 107 Hudson St., New York City.

THOS. KENNEDY & SON, offers the Largest Stock in Livingston County, of

DANSVILLE, N. Y.,

APPLE, STANDARD AND DWARF PEAR, PLUM, CHERRY, AND QUINCE FOR FALL '94 AND SPRING '95.

WRITE US FOR PRICES BEFORE PLACING YOUR ORDER, *as our LOW PRICES will SURPRISE YOU.*

Nurserymen's Stock Book.

COMPLETE AND PRACTICAL.

Size, 16x21 inches.—58 pages. Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,
ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.



GREENVILLE and CROSBY.

REPORTS FOR 1891.

"One of the very best of 150 varieties fruited at Missouri Experimental Station. Crescent, the only one equaling it in productiveness, while but two excelled it in size."—JOHN W. CLARK, Horticulturist.

"A new berry of many excellent points, very large, good quality, and equally valuable for market and home."—GEO. C. BUTZ, Penn. Experimental Station.

REPORTS FOR 1892.

"Most productive of twenty-five selected varieties."—PENN. EXPERIMENTAL STATION.

"In your list of varieties Greenville merits first place, either for home use or market."—MISSOURI EXPERIMENTAL STATION.

Comparisons were obtained between Greenville, Warfield, Haverland and Bubach, from Six States, embracing the Experimental Stations of Ohio, Indiana, New York, Missouri and Minnesota, W. S. Scoville, of Wisconsin, and the Secretary of the Ohio State Horticultural Society.

By grading of above authorities on "Scale of Ten," Greenville leads for home use and market, as it received the highest average.

REPORTS FOR 1893.

By the average of Experimental Reports this year ***"Greenville leads for productiveness, market, home use and general purpose.*** See summary below:

This Summary is Based on Reports of the Ten State Experimental Stations named opposite.	Productiveness.	Market, Near.	Market, Distant.	Home Use.	General Purpose.
GREENVILLE,	1	1	2	1	1
WARFIELD,	4	6	1	6	5
HAVERLAND,	2	2	4	4	2
BUBACH,	6	4	5	5	7
CRESCENT,	3	7	7	8	3
CUMBERLAND,	8	3	6	2	8
ENHANCE,	5	8	8	7	6
GANDY,	7	5	3	3	4

OHIO. **DELAWARE.**
INDIANA. **MASSACHUSETTS.**
PENNSYLVANIA. **MISSOURI.**
SOUTH CAROLINA. **MICHIGAN.**
OREGON. **MINNESOTA.**

The "Scale of Ten" is based on a score of ten points, and the variety obtaining the highest grade is given first place. The figure 1 represents first place; 2, second place, etc.

No Stations sent comparisons on this list, for 1893, except the ones named above.

At the Annual Convention of the American Association of Nurserymen, held at Niagara Falls, June 6-7, 1894. The Committee on Exhibits class "Greenville" as being of ***large size, very good quality, moderately firm, and valuable for market, home use or general purpose.***

CROSBY Still leads for "Hardiness and Reliability of Crops."

TWELVE YEARS WITHOUT A FAILURE.

In a letter received June 1st, 1894, J. H. Hale says the fruit this year on Crosby will have to be thinned to obtain the best fruit; whereas on ALL other varieties in his orchards, only a few scattering peaches can be found, and that were all his trees of the Crosby, it would make him ***Fifteen Thousand Dollars*** more this year.

BUDS FOR SALE.

Sixteen page Catalogue, 1894, on Crosby and Greenville, sent free on application, also sample lithograph plates of Greenville. Write for prices and list of wants.

Resp.,

WILL EXCHANGE FOR STOCK NEEDED.

The Farmers Nursery Co.,

TADMOR, OHIO.

600 Acres.

Brown Brothers Company,

Continental Nurseries,

.....Rochester, N. Y.

Leading American and Canadian Nurseries.

If you need anything in the Nursery line write us.

Careful Grading.

Superior Packing.

Try our Standard Pears.

Prompt Shipment.

Four Offices.

Eight Greenhouses.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

October, 1894.

Painesville Nurseries.

Fruit and Ornamental Trees, Small Fruit and Grape Vines, Shrubs, Roses and Bulbs Hardy and Tender Plants.

LARGE ASSORTMENTS NEW AND OLD VARIETIES.

UNEQUALLED FACILITIES FOR PROMPT AND ACCURATE FILLING OF ALL ORDERS, LARGE OR SMALL. NO BETTER PLACE FOR NURSERYMEN TO SORT OR DEALERS TO PACK. IMMENSE CELLARS AND PACKING HOUSES. ORDERS BOOKED THIS FALL AND CARRIED IN CELLAR FOR EARLY SPRING SHIPMENT.

DECIDUOUS, UPRIGHT AND WEEPING TREES.

Large Stock of Splendid Trees at Low Rates of

Poplars—Carolina, Lombardy and Golden. Mountain Ash—European, Oak-leaf and Weeping. Alder—Imperial, Cut-leaf and European. Willows—Kilmarnock, New American, Rosemary, Babylonica, Laurel-leaf and Gold Bark. Elms—American, Scotch, Red, Purple-leaf and Camperdown. Linden—European, Silver and Weeping. Maples—Silver, Norway, Ash-leaf, Wier's, Schwedlerii, etc. Magnolias—Acuminata, Soulangeana, Speciosa, Purpura, etc. Mulberries—Teas' Weeping, Russian, White and Black. Balm of Gilead, Purple Beech, Catalpas, Horse Chestnut, Larch, Russian Olive, Tulip, Flowering Thorns, etc., etc.

NUT TREES.

HEAVY STOCK, ALL SIZES.

Chestnut—American, Spanish and Japan. Walnuts—Black, English and Japan. Butternuts, English Filberts, Shell Bark Hickory, Almonds, Pecans, etc.

ROSES.

LARGEST STOCK IN THE U. S.

Hybrid Perpetual, Moss and Climbers; strong field grown; better and cheaper than imported.

TREE ROSES for Fall Delivery; very fine.

BULBS for Fall Trade direct from the best Holland and French growers.

Highest Quality at Lowest Rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. **1000 ACRES.** **28 GREENHOUSES.**

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

A FEW OF OUR SPECIALTIES FOR FALL 1894.

GOOSEBERRIES.

Supurb plants of DOWNING, INDUSTRY and COLUMBUS.

CURRANTS.

Fine Plants of CHERRY, FAY'S, VERSAILLAISE, VICTORIA and WHITE GRAPE.

HARDY ROSES.

Without doubt the finest collection in America; strong plants, budded and on own roots, for October delivery.

HORSE CHESTNUTS, AMERICAN CHESTNUTS, CAROLINA POPLARS.

Handsome and well grown trees.

Send for our prices on the above, also on all kinds of general Nursery Stock.

ELLWANGER & BARRY, Mt. Hope Nurseries,

ROCHESTER, N. Y.

"The most complete nurseries on the American Continent."

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

KAWANA, MITCHELL CO., N. C.

(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

STANDARD AND DWARF PEAR,

APPLE, PLUM, CHERRY, RUSSIAN APRICOTS,

CUT-LEAVED WEEPING BIRCH,

And Low Budded Roses on Manetta Stock.

Prices Low and Stock Good.

Special Prices on Car Lots.

JAY WOOD,

KNOWLESVILLE, N. Y.

JACKSON & PERKINS,

Newark, Wayne Co., New York.

Growers of

CHOICE SPECIALTIES

For Nurserymen and Dealers.

"GENEVA, N. Y., June 28, 1894.

"JACKSON & PERKINS, Newark, N. Y.:

"Gentlemen:—We were well satisfied with the character and grade of the Roses which you shipped us this past spring. *Of the 20,000 plants, we were not obliged to reject any.*

"Yours very truly,

"R. G. CHASE & CO."

☞Used by permission.

OUR SPECIALTIES ARE

ROSES AND FINE ORNAMENTALS.

BUT WE ALSO GROW A GOOD ASSORTMENT OF GENERAL NURSERY STOCK.

GET OUR PRICES ON YOUR WANTS IN ALL LINES.

The Thomas • Tree Balers.

THREE SIZES.

Small size will bind bales of 40 3-year trees or less. Valuable for baling in field or packing ground.

Medium size, of wood or gas-pipe, will bind bales of 10 to 150 lbs. See cut of this size.

Large balers for bales all sizes up to 700 lbs.

Our customers say the Balers are worth their cost for *one packing.*

Send for Price-list and Circulars.

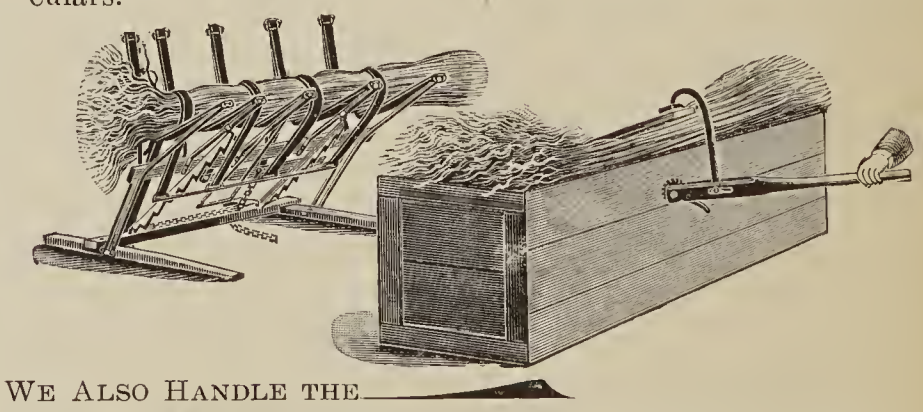
The Thomas • • Box Clamp

FITS ALL SIZES OF BOXES.

One Man Can Rapidly Close the Fullest Boxes.

You will save time and money to buy this clamp and *throw away all other styles* of clamp. *

It is *simple* to use as a *cant hook.* Can be adjusted by rolling ratchet so that rib will come *exactly* to place.



WE ALSO HANDLE THE

THOMAS AUTOMATIC IRON HAND TRUCK.

Every nurseryman needs it for handling large boxes. We received the Highest Awards at World's Fair on Balers, Clamp and Truck.

STEVENSON & THOMAS, - - NORTH BEND, NEB.

THE BEST ROSES,

Azaleas, Rhododendrons, Clematis, Etc., are supplied by the

BOSKOOP HOLLAND NURSERY ASSOCIATION.

For catalogues and prices address, **C. H. Joosten,**

3 Coenties Slip, New York.

C. F. McNAIR & CO.,

DANSVILLE, N. Y.

STANDARD APPLES, STANDARD AND DWARF PEARS, PLUMS, CHERRIES, ETC., IN LARGE ASSORTMENT FOR FALL, '94, AND SPRING, '95.

WRITE FOR PRICES.

Correspondence Solicited.

C. F. McNAIR & CO., Dansville, N. Y.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS, in great variety. Descriptive Catalogue and Price-List free. * * * * * * * * * * *

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

IN CAR LOAD LOTS

Apple, Carolina Poplar, Cherry, Silver Maple,

ALSO, A GENERAL ASSORTMENT OF OTHER STOCK.

PEACH, PLUM, PEAR (Standard and Dwarf), **GOOSEBERRIES, CURRANTS,** and other **SMALL FRUIT AND ORNAMENTAL TREES AND PLANTS.**

Complete List of Varieties; : : : : : : : : :
Stock Young, Thrifty, and of Best Quality; :
Carefully Graded and Handled. : : : : : :

Write for SPECIAL PRICES in CAR LOAD LOTS. Personal inspection courted. SPADER—see Trade List. Trade List ready September 1st.

ALBERTSON & HOBBS,

BRIDGEPORT,

MARION COUNTY, - - - - INDIANA.

When writing to advertisers mention The National Nurseryman.



GREEN MOUNTAIN GRAPE.

25,000 Two and Three Year Vines of prime quality. Will fruit next season.

Also, a General Line of Nursery Stock.

Including **75,000 CHERRY,** La Versailles & Fay's **CURRANTS,** and four acres of two-year Apple Seedlings, a large stock of Handsome Maple Trees and other stock too numerous to mention. Send to us your list of wants. Address,

STEPHEN HOYT SONS, - - New Canaan, Conn.

Baltimore and Richmond Nurseries

Offer for Fall '94 and Spring '95 large stock of the following:

Apple, Peaches, Plum (Japan and others), **Apricots, Nectarines, 1-Year Standard Pear** (heavy on Kieffer, Garber and Clapp's Favorite), **Grape, Asparagus, Strawberries, Osage Orange, Shade Trees, Evergreens, Shrubs, Etc., Etc.**

Well-Graded Stock! Prompt Shipment!

SATISFACTION GUARANTEED.

Special attention to growing Peach Trees of which we have the usual quantity. We are prepared to give prices to suit the times.

Franklin Davis Nursery Co.,

Baltimore, Md.

"Nice lot of Smock and Promiscuous Peach Pits" for immediate shipment.

PRICES ON APPLICATION.

1838. **56 Years. 300 Acres.** 1894.

ESTABLISHED 1838.

NEW APPLE, PEAR AND NUT TREES.



Starr, Parlin, Paragon and other Apples.
Lincoln Coreless, Seneca, Japan Golden Russet, Vermont Beauty and other Pears.
Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.
French, Persian, English, Japan Walnuts.
Pecans, Almonds and Filberts.

NOVELTIES.

Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifoliate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries Downing and Hicks Mulberries 1 and 2 years old in large supply.

SMALL FRUIT PLANTS.

Immense Stock of Silver Maples, Lombardy and Car. Poplars and other Shade Trees. Catalogue free.

POMONA NURSERIES,

WILLIAM PARRY, PARRY, N. J.

When writing to advertisers mention The National Nurseryman.

FAIRMOUNT NURSERIES,

TROY, OHIO.

We have in surplus for this fall's trade a fine assortment of

APPLES,
PEARS,
CHERRIES,
PLUMS,
APRICOTS.

DOWNING AND HOUGHTON GOOSEBERRIES,
MAGNOLIA ACUMINATA,
A FULL LINE OF
EVERGREENS AND
ORNAMENTALS.

—ALSO—

APPLE SEEDLINGS,

Send List of Wants.

CLOSE PRICES. CHOICE STOCK.

GEO. PETERS & CO.,

Troy, Ohio.

APPLE TREES 2 and 3 years old, 3-4 in. and up, 5 to 7 feet.

And all the lighter grades to offer for the Fall delivery of 1894 and Spring of 1895, at prices that cannot be beat. F. O. B. in car lots from any of the following points: Lee's Summit, Mo.; St. Joe, Mo,; Council Bluffs, Ia. and Sandwich, Ills.

Correspondence will be promptly answered from any of the above named points.

We are always in front in the race for the disposition of Apple Seedlings and Foreign Fruit Tree Stocks.

H. C. GRAVES & SONS,

Lee's Summit, Mo.

The North Star Currant.

THE BEST GROWER . . . . .
THE BEST FRUITER. . . . .
THE BEST SELLER . . . .
THE BEST RED CURRANT

ON EARTH TO-DAY.

The "NORTH STAR CURRANT" is a rapid grower, a very prolific bearer of large fruit, of a sweet, delicious flavor, and yields a *sure crop* every year. The fruit does not shell or drop off nor does it scald. "THE NORTH STAR CURRANT" has more strong selling points, backed by genuine merit, than any other specialty on the market to-day.

IF YOU WANT something new that will secure orders *with good margins*, try the "NORTH STAR." For full information and reduced prices, write the introducers.

The Jewell Nursery Co.

LAKE CITY, MINN.

R. H. BLAIR & CO.,

Office Northwest Corner 11th and Walnut Sts., ... Kansas City, Mo. . . .

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail,

STRICTLY NO. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM, ...

Roses, Ornamental and Shade Trees. Prices low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

PITTSFORD NURSERIES.

WALES M. NYE.
C. BURTON NYE.

We make a specialty of all the leading varieties of

STANDARD APPLES and PEACHES.

Also offer Pear, Plum, Cherry and Quinces.

Write and get our prices. WALES M. NYE & BRO.,

PITTSFORD, N. Y.

APPLE SEEDLINGS.

Write for Prices.

Can supply all grades in **Straight** or **Branched Roots**, as wanted. Grades and quality unsurpassed. No disease or insects guaranteed. Plants are grown on new, rich upland prairie. Address, **J. A. GAGE, Fairbury, Neb.**

SPECIAL BARGAINS —ON— ELEAGNUS LONGIPES.

Large Stock of Fine Plants One Year Old.

PRICES ON APPLICATION. BERKHAM & OTGEN

39-41 Cortland St., New York.

When writing to advertisers mention The National Nurseryman.

When writing to advertisers mention The National Nurseryman.



Á GLIMPSE INTO SANTA ROSA VALLEY, CALIFORNIA.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by The National Nurseryman Publishing Co.

U.S. DEPARTMENT OF AGRICULTURE DIVISION OF STATISTICS

VOL. II. ROCHESTER, N. Y., OCTOBER, 1894. NO. 9.

NATIVE AMERICAN ORNAMENTALS FOR AMERICANS.

To be profitable from a wide business point of view, an article must be, either through its novelty or rarety of such "quick" value, as to command a high (though generally unstable) price—each sale producing very large profits, or it must be of a "cosmopolitan" and stable nature, the *paying qualities* arising from a multitude of sales, each transaction furnishing its small quota of gain, the aggregate profits effecting the *profitable business*. The latter is, I believe, conceded to be practically the best and safest way to estimate any trade, and from a sound business standpoint it is the only sure way.

Just so far as an article of commerce becomes the "staple" of a widely-extended patronage — be it a "luxury" staple or a necessary of life—just so sure, and to the same extent, will it contain the element of profit—cost of production and handling being considered.

As with all classes of merchandise, so it is with the trees and plants of the nurseryman and florist, and the cautious plantsman is very wary of stocking up with plants of an unprofitable past record, or of doubtful future promise. He must be satisfied with its "takability", or he is content to let it alone.

While a nurseryman should be in the truest sense an educator of his patrons, he is most decidedly too often merely a willing *hireling*, and therefore an unfaithful servant, of these same customers, perhaps gaining a little in immediate sales thereby, but losing much in the long run. He notes with pleasure the insatiable desire and persistent call of his patron, the American plant buyer, for "horticultural pastry," and is ever anxious and ready to supply this demand with "novelty pies," as a rule of doubtful merit and worth, and often completely untried. No sooner does the buyer rally from the indisposition resulting from a trial of this unwholesome horticultural dessert (and recuperation is astonishingly rapid) than, like Oliver Twist, he calls for "more," and, undeterred by past experience, he is ready to test the next expensive novelty offered, by the same dealer perhaps and with the identity of the article unchanged by its new and startling appellation. Thus proving the well known fact that a high price for a high-flown description is willingly paid for, rather than a reasonable price for the plant itself.

What are the effects—who is at fault—where is the remedy to be found? To the first question, I will only say here in passing, that the effects are blighting in the extreme to the higher development of the æsthetic in horticulture—both as it effects the plantsman and his patron. That they will lower the standard of horticulture as a trade, and in its higher branches, such as landscape gardening, as a profession, there is no question. Any profits accruing are only temporary, the plant buyer becoming eventually thoroughly discouraged and disgusted, and business integrity and bona fide business relations between buyer and seller being inevitably jeopardized.

To the second question I answer emphatically, both the nurseryman and his patron are to blame. The work and aim of the former seeming to be to cater to the unformed tastes of the latter, rather than to assume the position of "educator."

But here I am assuming him to be properly qualified as such, though only too often he is not. Few have been willing to take the initiative, which would inevitably necessitate more or less loss to themselves, and so the work of raising the standard and bringing about permanent salutary changes has been greatly retarded.

It has been stated, I think justifiably, and certainly so in the past, that the American plant buyer is not, as a rule, so horticulturally intelligent as his foreign neighbors, but due allowance must be made for the fact that horticulturally considered, America is yet comparatively new.

Note the following facts: In the United States there are now open to the people but *five* public botanic gardens, while the little country of Belgium, less than one-fourth the area of North Carolina, can boast as many; Austro-Hungary, smaller than Texas, has fifteen; France, 22; Germany, 35; Great Britain and Ireland, 11; Indian Empire, 9; Italy, 22; Russia, 14; and even the comparatively insignificant islands of New Zealand have three.

To these public gardens, the everyday citizens betake themselves for recreation, and, unconsciously to themselves, are led to study and admire the beauties of their native flora, generally disposed in generous unprejudiced contrast to the best examples of exotic growth.

Agitation tending toward a national betterment in these lines is now in progress however, and the results are apparent everywhere. New public botanic gardens are in course of construction, and national and city parks are the order of the day. The protection of our forests is a movement claiming and receiving much attention, though all too inadequate at present, and the planting and care of private grounds also is receiving more widespread and intelligent study than ever before.

I think Prof. L. H. Bailey's remarks in this connection in his "Annals of Horticulture for 1891," are not only apt and just, but even savor of charity. He says: "Probably no part of American horticulture is making such rapid progress as floriculture and other branches of ornamental gardening. This progress springs from both the positive energy of the florists themselves and from a rapidly growing demand for higher standards on the part of the public. There is probably no single factor in our national life which is more auspicious of refinement and love of home and country than this increasing expression of the æsthetic sense."

"A second indication of the growing love for plants and ornamental gardening is the increasing demand for practical advice concerning the embellishment of homesteads and city openings, and also the fact that a considerable number of professional landscape-gardeners now find constant and remunerative employment. The growth of the idea of the ornamental city park is a conspicuous tendency of the later years, and one which has exerted an influence too great for calculation.

"All these tendencies are matters of pride to every thoughtful citizen, for they show that the American is not deficient in that æsthetic taste which has been said, so often, to be foreign to him. The development of a great and new country has thus far absorbed attention, for it is only until the rougher elements of nature are overcome that the quieter joys of the garden appeal to the popular mind."

My object is first to call the attention of the American nurseryman to a comparatively new and profitable line of plant growing—that of hardy American ornamentals, and to describe a few of the best and most noteworthy examples of our indigenous trees, shrubs and plants suitable for the commercial grower, with special reference to the rarer growths of the Carolina mountains. After ten years devoted exclusively to the introduction and dissemination of our best native growths, I may be allowed the privilege of affirming that some of the hardiest, most beautiful and most easily grown of all ornamental trees and plants are as unknown to the majority of our leading professional nurserymen and florists as they are to the American gardener, while at the same time, strange to say, our American plantsman is perhaps the most energetic and pushing of any in the world.

And why? I can best answer by again calling to my aid Prof. Bailey: * * * "There is a general feeling that, as a people, we have not appreciated our native plants, and it is probably true that they have been much neglected until within very recent years. Many of our familiar garden fruits and flowers are of American origin, but they have seemed few in comparison to the whole number of desirable and tractable native species." * * *

"It is not strange that American plants should have been first cultivated in England or other parts of Europe. Horticulture, especially the growing of plants for ornament, reaches its highest development only as the face of nature becomes softened by improvements, and as institutions become staid and self-sustaining. And it has always been true that plants have been first appreciated, as a rule, in countries to which they are strange and unfamiliar, for novelty has been quite as important as merit in favoring their dissemination."

Thomas Meehan, the well-known authority, says: "When I came to Philadelphia, in 1847, the introductions to our gardens were wholly from Europe. It was rare to find even an American tree, to say nothing of the herbaceous plants, even the cultivated varieties of our native plants, such as phloxes, pentstemons and rhododendrons, came from Europe."

Since 1885 or earlier, the increase in demand for ornamentals of native American growth has been so notable as to cause repeated and marked comment from the horticultural and gardening journals. Of innumerable points to be told in their favor, I will but briefly mention availability, hardiness, cheapness, ease of culture, freedom from disease, graceful and striking contour of growths, delicacy of foliage and flower, and, for the present at least, *novelty*. "Many of our best wild flowers are as distinctly novel, as unlike anything Europe furnishes, as our native red man is unlike the Caucasian."

Soon our catalogues will not only offer a sprinkling of American trees, as they now do, but will share equally with the finest exotics, a favorable position and division of the space, and embellish their pages with well executed cuts that will attract the eye, be a perpetual pride to the nurseryman, and inspire the buyer to larger and more satisfactory, if not so expensive, purchases.

HARLAN P. KELSEY.

A GLIMPSE INTO SANTA ROSA VALLEY.

The frontispiece of this issue presents a glimpse into the Santa Rosa valley, California, looking west from Rincon heights, showing the southern part of the city of Santa Rosa nestled among trees, vines and flowers. In the foreground are orchards, vineyards, hopyards and fields of corn, grass and ripening grain.

The valley is here ten miles wide. In the background are the gently rolling evergreen hills and valleys of Sebastopol and vicinity, where grow the finest fruits and berries in almost unlimited quantities, which, fresh canned and dried, find their way to the various markets of the world. Twenty to forty-acre blackberry or strawberry patches are not uncommon. The soil is a deep, moist, brown, sandy loam, which is easily worked and never requires irrigation for any crop.

In the dim background are the giant redwood forests towering from one hundred to three hundred and fifty feet in height, and often twelve to eighteen feet in

diameter, in whose shades and open spaces grow the evergreen wild huckleberry, (generally black) often red and sometimes white ; salmon berries, red and yellow ; salal berries, red ; raspberries, red, black and rarely yellow ; wild strawberries, crabapples, Juneberries, dewberries, hazel nuts and the golden-leaved chinquapin. A few miles further west—twenty-two miles from the point of view,—and about fifty miles from the Golden Gate, on the shores of the Pacific Ocean, near the mouth of the Russian river, is Fort Ross, the old Russian settlement and stronghold, where still may be seen the old Greek church, fort and dwellings, with orchards of pear and apple planted by the Russians and still thriving and bearing fruit.

Along the evergreen shores of the Pacific, the principal business is the production of butter, (which is nowhere surpassed) eggs and potatoes ; yet the soil and climate are well suited to the profitable production of long-keeping apples and pears, as well as olives and nuts.

Santa Rosa is the home of Luther Burbank, the well known originator. His home and grounds are in the center of the picture and his Sebastopol branches are eight miles westward, also near the center of the picture. It is here that Mr. Burbank produtes his wonderful results with fruits and flowers.

THE SEASON AT GENEVA.

Geneva, N, Y., Sept. 18.—The fall digging season is on us and for a week past many loads of trees moved in our streets—several car loads will be shipped this month. The dry summer has caused trees to mature early; rains have been frequent lately and the digging is easy, a great contrast to the usual method when dynamite and other powers were desired to get orders dug in season. It is evident that the usual number of trees will be shipped from this centre this fall. Though prices rule too low to satisfy the growers, yet the bottom is reached and it is a fact that on some items a better price could have been had.

When will nurserymen learn to co-operate? If it is not desirable to form combinations surely the capital, intelligence and necessities of the case point to the desirability of having a bureau of information, so they can know the amount of stock on the market. If such a plan can be carried out it would prevent one's selling a short supply at too low a rate. Nurserymen, of all professions, have the unhappy faculty of finding a thing out too late. As retailers and growers all admit that wholesale prices are too low, it would seem reasonable to suppose that some concerted action might be arranged.

Two-years-old standard pears block in New York are not as good as usual, and the question is raised if one cause of it may not be the use of the modern "branched rooted seedling." Years ago the lands selected for growing standard pears were heavy clay; in wet seasons straight-rooted seedlings were planted, but the stand was often imperfect. Later years branched roots have been almost wholly planted, and the point is that branched roots form a whole system of roots nearer the surface, and are more liable to injury in the winter from "freezing dry." Straight-rooted seedlings form their roots, as the tree grows, deeper in the soil and further away from the changes that occur in the surface soil.

Has the introduction of the Kieffer pear killed the standard pear business?

No doubt it has had an important effect on it. Twenty years ago only a limited section of the country could grow pears at all, and now the Kieffer (a so-called pear) can be grown anywhere, and the large numbers grown and used, because of their free growth, probably has taken the place of hundreds of thousands of trees formerly grown by the "standard pear kings of New York."

Look out for the same result in the plum business, because of the growing demand and the remarkable character of the Japanese varieties, in foliage and habit of growth. An enormous crop of plums has been marketed this month. Two express car loads a day, large shipments by freight and the canning factories have been the ways to market. Considering the large crop the returns have been satisfactory.

Quinces will be a good crop. Some pears have borne well, a fair crop of peaches all together make the income from the orchard more than usual notwithstanding the short apple crop.

MONROE MATTERS.

Monroe, Mich., Sept. 28.—John Morey Jr., Dansville, J. W. Gaines, of Hoover & Gaines Co., Dayton, Ohio, and E. H. Pratt of the T. S. Hubbard Co., Fredonia, N. Y., were recent callers at this place.

Greening Bros. have bought the entire stock and control of the Courath raspberry, and they will soon ask the trade to take hold of it and help sell it.

Digging was commenced here on the 25th for filling early orders of pears and cherries.

There is an orchardist at Ironville, O., who has 80 Baldwin apple trees that will average 12 bushels of fine fruit to the tree. The result is attributed to spraying.

The New Prolific peach continues making friends. There were trees in full bearing this year and they made a very nice showing. Every fruit grower within "coming" distance was invited to see the trees and they were pronounced superior to any other sort in cultivation.

ArZena.

AMERICAN ORCHID COLLECTIONS.

Eugene V. Low, of the great orchid house of Hugh Low & Co., London, England, was in Rochester on September 22d. He visited the orchid collection of William S. Kimball of this city. He said that Mr. Kimball is one of the most liberal and successful growers of orchids in America. The collection of the late Frederick Ames of Boston is the most valuable in this country. Next in order are those of Hicks Arnold of New York; Charles G. Roebling of Trenton, N. J., and Mr. Kimball of Rochester. Mr. Kimball's collection of cypripediums is the most valuable in the world.

"The flowering of orchids," said Mr. Low, "is a matter of speculation. Here is the most common specimen, the cypripedium ursique from Assam, India. It is green with heavy spots of purple-brown. It is the variety usually sold for cut flowers at from 25 to 75 cents per blossom. We sold Mr. Kimball 100 plants of this variety for 90 cents each several years ago and from one of these plants he secured a light yellow flower without spots and with a beautiful margin of white. This specimen is valued by Mr. Kimball at $1,000. He might not find another equally valuable in ten thousand seedlings.

"What is the highest priced orchid in existence?"

"I think the honor is claimed for a specimen of the cypripedium stonei platytaenium, valued at $5,000. This plant was imported twenty years ago and flowered in the collection of the late John Day, of London. It was sold once for $700. One specimen is now owned by Sir Trevor Lawrence and another by Baron J. W. H. Schroeder. It flowered first in 1867. It has broader and shorter petals and a higher color than the type from which it originated. Ordinary specimens without its marked characteristics are worth only $5."

This is Mr. Low's nineteenth visit to America where he spends several months each trip. He paid a high compliment to George Savage, Mr. Kimball's chief gardener, whom he regards as one of the most competent men in the country.

AMONG THE FRUITS.

Jacob Moore of Attica, sends us samples of his new pear, Moore's Sugar. It is from seed of Seckel fertilized by Duchesse d'Angouleme. It is of handsome color, larger than the Seckle, sweet and very juicy. It ripens before the Seckel and is an abundant yielder.

Some one said last year that all the claims for the Crosby peach were fully sustained, except in regard to size. J. H. Hale sent us recently samples of this peach which measured 10½ and 11½ inches in circumference. The pit is small and the color and quality of the fruit are excellent.

The Ricker National Nursery Co., Elgin, Ill., sends us a sample of a seedling apple, which it says is from a chance seedling discovered in the woods. The tree is still young and a vigorous grower. The apple is of medium size, of cream and pink color, much in appearance like Smith's cider. It is very tart. It belongs to the class of winter apples and looks as though it would keep well. This company will propagate it and will top work it upon Duchess stock.

A sample of the Dempsey pear sent by Stone & Wellington, Toronto, bears out the excellent reputation which this pear has attained.

NOTES ON BIRCH GRAFTING.

It is a well-known fact that increasing stock of different species of birch by budding often results in failure, and it is my experience that where this is the case success can be obtained by grafting. Budding has almost always been the process employed, as very few have had the necessary experience in grafting fine ornamentals in the open. Numerous experiments both here and in Europe in grafting, have resulted in failures; and wherever this has been the case it has been caused by using wood of one year's growth. For grafting of the birch I would recommend wood of several years' growth, taken from trees which had been cut back several years before, to be grafted on old wood. I have grafted many birch trees by the method mentioned and have always obtained most satisfactory results. I would specially commend this process for grafting the popular Betula alba var. Youngii pendula on common birch. With proper care and manipulation results are obtained fully equal to those in grafting Salix caprea var. pendula.

Rochester, N. Y. HUGO LILIENTHAL.

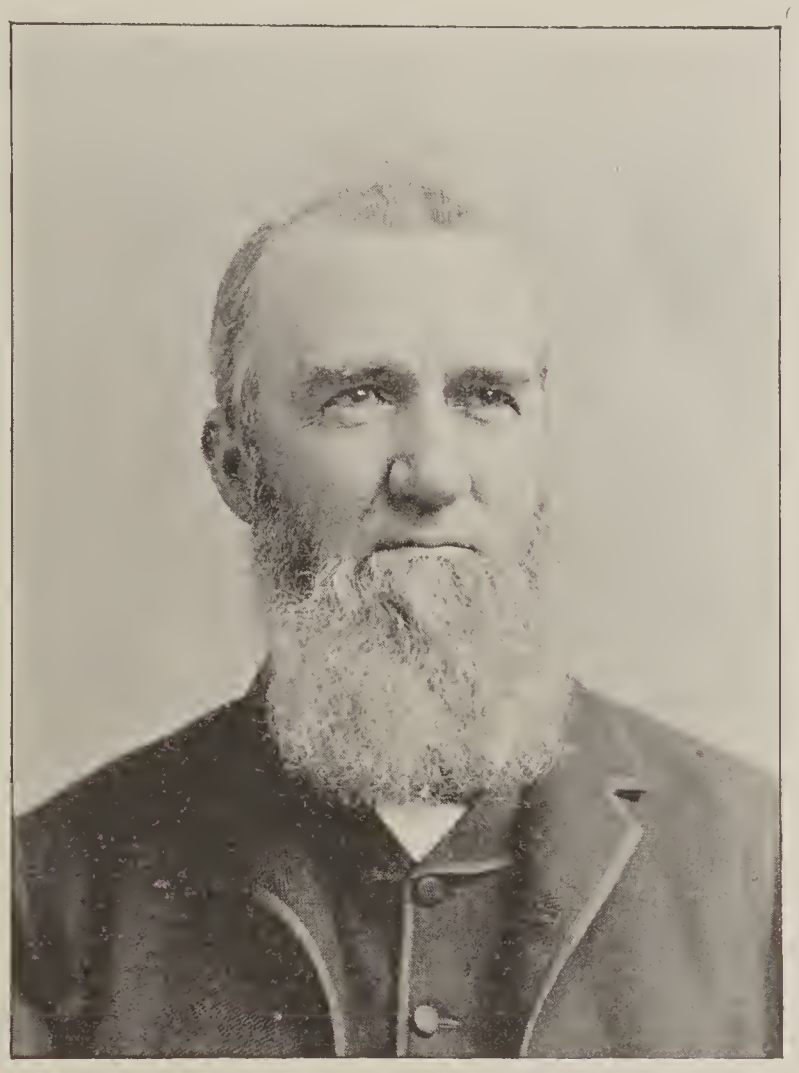
AN OREGON INCIDENT.

It is astonishing how many people there are who can be imposed upon in the matter of purchasing fruit trees, says the *Rural Northwest*, of Portland, Ore. Quite recently a case was reported in which a man living near Portland and within a mile or two of three nurseries, bought a number of Duchess of Oldenberg apple trees from an eastern nursery and paid 75 cents each for the trees. The agent who sold the trees led the man to believe that the Duchess of Oldenberg was a new and rare variety which could not be obtained from Oregon nurserymen. Another man living within gun shot of Mr. Failing's nursery in East Portland paid a dollar apiece for Idaho pear trees for this season's planting, and was much surprised to learn that they could have been obtained from Mr. Failing for 15 cents each.

FRANKLIN DAVIS.

Franklin Davis was born January 14, 1829, in Bedford county, Pa. He was left an orphan and penniless at the age of six years. A relative in Adams county, Pa., recognizing in him the promise of true worth gave him a home and allowed him to attend school during the winter months. He was soon repaid for his kindness by seeing the frail boy develop into a bright and willing lad.

Mr. Davis very early in life showed a great interest and fondness for fruit growing and raising trees. His first grafts were set in the fence corners of the farm where he made his home. He missed no opportunity to accumulate knowledge in his chosen vocation, hence by the time he arrived at the age of twenty-one, he was well qualified to launch out for himself.



FRANKLIN DAVIS.

Believing that the South offered a promising field for his work, he loaded several boxes of grafts in a one horse wagon in the spring of 1850 and turned his face toward Rockbridge county, Va. He was not troubled with the care of much money, but owned the grafts, horse and wagon, a few hundred dollars, and better yet, a strong body, level head and an honest heart. Through many ups and downs, planting, working and selling trees with his own hands, he laid the foundation of a great nursery.

Mr. Davis soon saw that the nursery business would have many advantages and could be operated more successfully and meet the demands of his rapidly growing trade better if he were located nearer a larger town, and he therefore began planting at Staunton, Va., and by the time the civil war arose he had a large business and had accumulated $20,000. But the war came on and Virginia, unfortunately, was compelled to furnish much of the battle-field. Trade was paralyzed and nearly everything was destroyed. After the war Mr. Davis made another move, which was the best stroke of his life. With S. C. Kent (lately deceased) Mr. Davis opened up the nursery business on a large scale at Richmond, Va. They met with success on every hand. Mr. Kent sold out his interest in 1879, and Mr. Davis, desiring to locate near his old home in the evening of his life, moved the main office and nursery to Baltimore, Md. The business is operated at both Baltimore and and Richmond.

In 1892 Mr. Davis suffered a severe stroke of paralysis, the result of over-work, which rendered him physically unable to take an active part in the business. Recognizing his condition, he formed at once a stock company, known as the Franklin Davis Nursery Company. The capital stock was fixed at $100,000. Franklin Davis was made president; Howard Davis, secretary and treasurer; Edwin Davis, vice-president. The stock company has met with a most encouraging reception by the business community. Trade has greatly increased and the planting counts up in the millions. From a very humble beginning, as a result of energy, industry and honesty, Mr. Davis has built up a business of immense proportions, handling several hundred thousand dollars worth of stock annually and with nearly one thousand acres under cultivation and a host of employees. Mr. Davis was married in Pennsylvania. Three sons and two daughters are living. His faithful wife, for thirty-seven years, is still spared to comfort him in his affliction and enjoys good health. In the evening of their day, hand in hand, they go down life's pathway, enjoying the fruits of their labor.

The boys manage the business now.

The California State Horticultural Society is preparing to welcome the members of the American Pomological Society which will meet in California next January.

The eighth annual convention of the American Associtaion of Cemetery Superintendents was held in Philadelphia, September 11, 12, 13. Fifteen members attended the first convention which was held in Cincinnati. There are now 100 members, 75 of whom were at the Philadelphia meeting. The officers are: President, William Salway, Spring Grove Cemetery, Cincinnati; vice-president, Timothy McCarthy, Swan Point, Providence, R. I.; secretary and treasurer, Frank Eurich, Woodlawn, Toledo, O. A paper on "Suitable Shrubs for a Modern Cemetery" was read by Thomas B. Meehan. The lawn plan for the improvement of cemeteries was advocated, also the planting of perennials rather than annuals.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance.....$1.00
Six Months ..... .50
Foreign Subscriptions, in advance..... 1.50
Six Months, " " 1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second class matter.

ROCHESTER, N. Y., OCTOBER, 1894.

SEVENTY FIRMS REPRESENTED.

Seventy of the leading nursery firms of the country, including every feature of the trade, were represented in the advertising columns of this journal in its last issue. There can be no better indication than this of the progress of the nursery business. Fortunately the reverses of the times have not affected this business so severely as they have other lines, and now as the country is entering upon a new order of things under a revised tariff, there is reason to believe that the gain in the nursery business will be the more rapid because the drop was not so great. Up to the middle of the summer sales had not fallen off as expected and now the strengthening of confidence should effect favorably the collections upon which so much dependence is necessarily placed.

There are many reasons for believing that the nursery business will be rapidly increased. The period of low prices for nursery stock was a severe strain upon those small firms throughout the country to whose operations that period was mainly due and the effect of the general financial depression which followed closely was more than many of the small concerns could stand. The result is that the larger firms, upon which depends the stability of the business, find that the annoying surplus of stock which existed has disappeared and as a result there is a chance for a better grade of stock which ought, and of necessity must, demand a better price.

Each year there is exhibited more enterprise in the advancement of the trade in every branch. New methods are employed. Notwithstanding the feeble cry against novelties and the statement that the old kinds are good enough, there is an unmistakable tendency to adopt the novelties which have proved valuable and to encourage the originator in whatever line he may operate. This is in the nature of progress.

New sections of the country are being opened to the possibilities of horticulture and landscape gardening, not in the narrow confines that have marked previous periods, but on an extensive scale. The great peach orchards of the South, the great apple orchards of the West, the thousands of acres opened up to rapid improvement for park purposes in the suburbs of the great cities, the modern plan of improvement of large building tracts, the growth of associations of cemetery and park superintendents, the fostering of fruit and flower exhibits and the interest maintained in the discussions of horticultural, agricultural, floricultural and viticultural societies all over the country suggest the possibilities of the nursery trade of the future.

Seventy of the leading firms in the business advertising in a single issue of the representative trade journal, and the bustle and activity which characterize the scenes on hundreds of packing grounds this month as a result of those advertisements leads one to forget tariff and the dull times and to bend anew to the work of doubling the sales of the most prosperous record and to exert every effort to raise the standard of the trade to a higher point.

CUT PLANTINGS IN TWO.

Editor of THE NATIONAL NURSERYMAN :

We noticed the article in the September issue, "One Remedy for Prices." While the idea there expressed may be correct so far as it goes, "Sell the best only," that does not go far enough. The fact is there is hardly a nurseryman of any pretentions, East or West, that has not twice as much as he ought to have. And as long as this condition exists, stock of whatever grade will be offered at cost and below, in order to clean the land and realize something. Our opinion is that we must strike at the point of beginning. Plant less. Cut the plantings in two or three if necessary, and when the *surplus* is cut off, when the product is all *wanted*, then we may expect to get a fair price again. There is no doubt of the correctness of this theory, and the only question is, will we next spring keep up our usual plants and grow at a loss? Or if necessary *throw away one-half our stock* and grow at a fair profit? We are inclined to the latter.

Lawrence, Kan. A. C. GRIESA.

THE danger of importing the San Jose scale on fruit from California was referred to in this journal a short time ago. It is now reported authoritatively that California

pears received in New York city markets are infested by the San Jose scale, Aspidiotus peniciosus. Should not California laws affecting nursery stock be offset by New York laws affecting fruit?

CONDITION OF FRUIT.

The statistician of the U. S. Department of Agriculture reports that the average condition of apples has declined during the past month from 44 to 40.8. The conditions are highest in New England, where percentages range from 67 to 89, and in the mountain and Pacific states, where the lowest condition, 50, is in Nevada, and the highest, above the normal, in Idaho.

The condition of peaches has fallen a little over 1 point since August 1st, and now stands at 21.1. East of the mountain states but three states have a condition of 60 or over, viz, New Hampshire, New Jersey, and Michigan. The first of these has no commercial weight as a producer of this fruit. Colorado has a higher condition than any other state, the percentage being 94. California follows with 89. The percentages of Oregon and Washington are much lower. On the Atlantic coast, south of Pennsylvania and New Jersey, conditions indicate a practical failure of the peach crop, and the same may be said of the states lying in the Piedmont region and of the western states generally.

The returns show a poorer prospect for grapes than at the same date in several years past, though the condition of this fruit is plainly higher than of either apples or peaches The grape suffers little from drought, dry weather being rather favorable to its development than otherwise. The low conditions are generally ascribed to the late frosts of spring, which killed the new wood on most early varieties.

NEW YORK STATE FAIR.

The exhibit of fruit at the New York State fair, September 6th to 13th, was marvelous, exceeding any ever made at a state fair in this or any other state. In round numbers there were shown 400 plates of grapes, 1,300 of pears, 5,500 of apples, 900 of plums and 250 of peaches. The earliness of the season no doubt materially reduced the size of the grape exhibit, many of the largest growers in Central and Western New York not showing, as their grapes were not sufficiently ripe. The show of plums was the largest and finest ever made in this country. Black Diamond, Arch Duke, Monarch, Prince of Wales and Field were shown by S. D. Willard of Geneva. All of these are comparatively new. Ellwanger & Barry had about 125 varieties of pears and a large exhibit of grapes and plums. E. Smith & Sons of Geneva, made a large exhibit of plums. A new seedling peach produced by W. G. Richards of Syracuse was very handsome. D. S. Marvin showed a new white currant as large as the Grape and a week later.

Ellwanger & Barry won 59 first prizes.

John Charlton of Rochester won first and second prizes on roses.

The Western New York Horticultural Society won the prize of $200 for the best show of fruit. It won the same prize last year and took second prize in 1892. A. M. Smith of St. Catherines was the judge.

WHAT WOULD YOU SAY?

If you were asked by a brother nurseryman how much you would give with others toward the establishment of a journal devoted exclusively to the interests of the nursery trade, a journal which would furnish you the nursery news of the country, to which you could refer at any time for information of value to your business, in the columns of which you could as in no other way discover your wants or advertise your offerings, a journal to which you could point with pride and say, That is the nurseryman's trade journal, would your reply be "At least one dollar a year?" We think so. Here then is the journal, established and offered to you at a price so low that it could not be made one cent lower. And yet some are holding off payment of that small sum while all the time they are enjoying its pages and reaping direct benefit from its advertising columns. Every nurseryman should own a file of THE NATIONAL NURSERYMAN from its first issue. The horticultural, floricultural and agricultural papers do not give you what this does—trade topics exclusively.

The first nurseryman probably to offer Japan ivy for sale in America, was Mr. John Charlton, of Rochester, N. Y., who spent heavy sums of money in advertising it, with very few to respond, says *Meehan's Monthly*. Thousands of dollars have since been made on the sales of this plant, but very little from this is represented in Mr. Charlton's bank account. That was in 1868. Few plants have achieved so wide a popularity—it is seen everywhere, in every part of the Union. The writer of this paragraph was recently showing the Japanese commissioners the sights of the city of Philadelphia, when one of the commissioners exclaimed in his newly acquired English, and at the same time pointing to the ivy growing over the walls of the Academy of Natural Sciences: "Me feel very much at home."

TARIFF RESULTS.

Several nurserymen have in response to inquiries from *The Florist's Exchange*, voiced the sentiments regarding the tariff which were expressed at the recent convention of the American Association of Nurserymen. The Franklin Davis Nursery Co., N. H. Albaugh, S. D. Willard, Jacob W. Manning, Storrs and Harrison and Howard A. Chase believe the new tariff will have a demoralizing effect upon a certain class of nursery stock.

P. J. Berckmans said: "I do not think that placing plants, trees, and shrubs commonly known as nursery stock, on the free list will have any material effect upon the trade, because from what I can learn the importations of such classes of stock have not been less during the time when the McKinley bill was in operation, than they were at the time when the old tariff was in effect, and such stock was imported free of duty. Individually I would have preferred a duty of 20 per cent. on all horticultural products, whether nurserymen's or florists' stock, as I think it would have benefited American horticulture, because under the free list too much cheap stock is imported into the United States, and this seldom brings the financial results expected.

Samuel C. Moon said: "I expect the effect of the new tariff legislation will be a *slight* reduction in the price of some of the smaller sizes of stocks which are imported and sold on their arrival in this country without being transplanted here, but stock which is grown in American soil will not, in my opinion, be affected much by this change in the tariff. Large sizes of trees and shrubs will not be imported in sufficient quantities to materially effect American prices, because of the bulk and weight of such stock. The expense and risk of importing will serve as a considerable protection for American nurseries. I think that fruit tree nurseries have nothing to fear from foreign competition, as the varieties grown here are so different from those grown abroad that planters will have a decided preference for home-grown trees. In the preparation of my autumn price list I have not taken any account whatever of the change of tariff in arranging prices, and do not anticipate that the recent legislation will have any appreciable effect upon my fall trade which is chiefly in the line of ornamental trees and shrubs with nurserymen and wholesale dealers as well as with retail buyers and planters."

Thomas Meehan said: "It seems to me that the whole question resolves itself into this—whether it is better for nurserymen to have more customers and cheaper trees, or cheaper trees and fewer customers. For my own part my thought is that the great trouble with nurserymen is, rather the absence of customers than the cost of his products, and I do not believe that cheapening products by free trade will tend to increase customers, which is the nurseryman's great want, but rather the reverse."

Among Growers and Dealers.

Ex-Secretary Charles A. Green of the American Association of Nurserymen, is traveling in Europe.

John Charlton, of Rochester, was superintendent of the floricultural department of the New York State Fair at Syracuse, last month.

H. W. Foster, of the nursery firm of Foster & Co, Geneva, N. Y., has been appointed assistant superintendent of the public schools of Ithaca.

DeWeese & Dye of the Rocky Mountain Nurseries at Canon City, Colo., said recently, "We are pleased to report a fine season in this section for growing nursery stock, and we challenge the world to show a finer line of apples, pears, plums and cherries."

The Auburn, N. Y., *Bulletin* of September 13th, says: "The numerous friends of Supervisor H. S. Anderson of Union Springs will sympathize with him in his sad affliction, the death of his wife, which occurred at the family residence at Union Springs, at an early hour Monday morning.

Frederick W. Kelsey of the Essex County, N. J., Park Commission, sends us an attractive pamphlet entitled "Park Benefits," published by the commission It will do much to extend the demand for ornamental nursery stock. Boston has 1,200 acres in public parks; Chicago, 1,600 and 20 miles of parkways; St. Louis, 2,100 acres; Philadelphia, 2,740; New York has Central park and Bronx River park, containing over 2,000 acres.

R. G. Chase, of Geneva, N. Y., arrived in New York on September 7th after a three month's trip in Europe. Mr. Chase went abroad for the benefit of his health which had become impaired by too close application to business. While the trip has not benefited him as he had hoped it might, he and his relatives feel greatly encouraged as to his future. From New York he went direct to the Adirondacks where he will probably remain until winter. We wish him an early and complete recovery.

Parker Earle, president of the American Pomological Society, has visited the Pecos Valley of New Mexico, and has returned full of enthusiasm over its prospects as an apple growing section. With Stark Brothers of Louisiana, Mo., he has formed the Pecos Valley Orchard Co., the purpose of which is to establish ultimately the largest apple orchard in the world. It is proposed to plant 2,000 acres into apple trees at once and to increase the planting until 10,000 acres shall be occupied.

RECENT PUBLICATIONS.

Among the really handsome catalogues of the season is that of Greening Brothers, Monroe, Mich. It is a carefully and tastily prepared book of eighty-six pages, illustrated with half tone engravings, lithographs and electrotypes. It is a credit to the well known proprietors of the River Raisin Valley Nurseries.

W. E. Gould, Villa Ridge, Ill., is the author of a pamphlet on grape culture which discusses the culture, picking, packing and shipping of grapes, and describes varieties. It is written with special reference to Southern Illinois.

W. S. Little & Co, Rochester, N. Y., have issued a handsome catalogue of sixty-four pages, profusely illustrated with half-tone engravings. The long lists of varieties in the large fruit and ornamental departments of the Commercial Nurserses are excellently arranged.

Vick's illustrated catalogue for the autumn of 1894 offers the same attractions which have made this house famous, as well as many new ones.

The first number of the new monthly magazine *The Landscape Architect* was issued last month by the Vista Publishing Co., of this city. It proposes to deal with landscape art, constructive building, interior decoration, horticulture, botany, forestry and good roads. It is a handsome publication and by reason of the wide range of subjects covered it should prove interesting. The first issue is embellished with excellent half-tone engravings.

The new edition of Johnson's Gardener's Dictionary, thoroughly revised and considerably enlarged by C. H. Wright, F. R. M. S. and D. Dewar, curator of the Glasgow Botanic Garden, is attracting the attention of florists, horticulturists and nurserymen. Upon its first appearance, in 1846, this book was recognized as the leading work upon the subject. In the present edition the whole of the matter has been carefully revised. The limitation of genera according to Bentham and Hooker's "Genera Plantarum" has in most cases been followed. Synonyms are quoted in the body of the work instead of in a separate list as before. Reference is made to standard botanical and horticultural works where reliable figures of the plants mentioned can be found. It is a work of nearly 1,100 pages and is indispensable to those who have to do with horticulture in its advanced forms. This dictionary gives in the most convenient form the genus, habit, method of culture, natural location and date of discovery of all plants. There are accurate descriptions of insects injurious to plants, with illustrations; also descriptions of tools and appliances used by the horticulturist. Nine pages are devoted to a description of orchids in general and methods of cultivation, while under special headings the genera are described in detail. This is one of the most interesting features of the work. The propagation of fruit and ornamental trees as therein described will make the work of special interest to the nurseryman. There are many other features which commend it. The price of the dictionary is $4.00. New York: MACMILLAN & CO. Rochester: SCRANTOM WETMORE & CO.

Nurserymen as well as florists and horticulturists are fortunate in being able to avail themselves of the study of so competent an investigator and compiler as Professor L. H. Bailey of Cornell University. In his "Annals of Horticulture" for 1893, just issued, he has presented a large amount of information of particular interest to the nursery trade. This most recent issue of this indispensable year book is conspicuous for its full history of horticulture at the Chicago World's Fair. The author spent most of the summer at Chicago for the express purpose of collecting facts for this volume. This is the only complete history of horticulture at the Columbian Exposition. Review of the World's Fair horticultural exhibits, with names of all plants and exhibitors; the only correct catalogue of World's Columbian plants. The volume also contains a full discussion of the yields and prices of fruits, vegetables and all other horticultural crops in North America during the year. There is a history of the orange trade, and accounts of the efforts to introduce American fruits into European markets. There is also a full set of statistics of the horticultural imports and exports of the year. Floriculture interests are well represented. There is a full account, with awards, of the World's Fair Chrysanthemum Show, a list of the Chrysanthemum registry of the year, and other matters pertaining to ornamental gardening. The list of new varieties of flowers, fruits, vegetables and trees, introduced in 1893, is an important feature of volume. This series of Annals, which began in 1889, has now reached the fifth volume. Most of the back volumes can still be had. Cloth, 12 mo. Price, post paid, $1.00. New York: ORANGE JUDD CO., 52 Lafayette Place.

In part fourteen of the "Book of the Fair" is completed the interesting chapter on the fisheries of the world, the copious illustrations of which convey a vivid idea of the peculiarities described. Full page engravings show the fine architectural details of the handsome fisheries building. Chapter eighteen introduces the reader to a wealth of luxury in the department of transportation. Surely views could not better portray the extraordinary results achieved by the managers of American railways in their efforts to make travel comfortable and a pleasure. Interiors of the finest parlor, drawing-room, palace sleeping, dining, observation, smoking and library coaches are depicted, together with primitive and modern styles of locomotives and unique methods of transportation under peculiar circumstances. Chicago: THE BANCROFT CO.

THEY HAVE BEEN BENEFITED.

The following live firms advertised in the last issue of THE NATIONAL NURSERYMAN. We are constantly in receipt of voluntary letters from many of them stating that their business has been materially increased by these advertisements, and several are very enthusiastic. It is a representative list. Will you join it?

W. & T. Smith Co.
Ellwanger & Barry.
Albaugh Nursery Co.
Hoopes Bros. & Thomas.
Smiths & Powell Co.
Franklin Davis Nursery Co.
Jewell Nursery Co.
Stark Brothers Co.
Stephen Hoyt's Sons.
Rakestraw & Pyle.
Jackson & Perkins.
Harlan P. Kelsey.
C. H. Joosten.
H. M. Simpson & Co.
Barbier Bros. & Son.
W. T. Hood & Co.
John Charlton.
A. C. Griesa & Bro.
Andre L. Causse.
J. A. Gage.
J. G. Harrison & Sons.
Berkhan & Otgen.
Thos. Kennedy & Sons.
E. M. Buechley.
N. A. Whitney.
F. M. Hartman.
Orleans Nursery Co.
L. G. Thompson.
J. Frank Norris.
Farmers Nursery Co.
P. D. Berry.
C. Boggs.
H. S. Hurd.
Gelhaar, Fleming & Fuller Co.
Wales M. Nye & Bro.
Lenault Huet,
Storrs & Harrison Co.
Hoover & Gaines Co.
Brown Brothers Co.
Hart Pioneer Nursery Co.
Phoenix Nursery Co.
H. C. Graves & Sons.
George Peters & Co.
Albertson & Hobbs.
E. Mo dy & Sons.
William Parry.
Z. K. Jewett & Co.
Samuel C. Moon.
John Palmer & Sons.
Stecher Lithographing Co.
W. M. Peters & Sons.
Younger & Co
C. F. McNair & Co.
Peters & Skinner.
T. C. Wilson.
Jay Wood.
C. S. Curtiee Co.
A. Blanc.
Levavasseur & Sons.
W. A. Watson & Co.
Allen L. Wood.
R. H. Blair & Co.
Gilbert Costieh.
Myer & Son.
F. W. Watson & Co.
Josiah A. Roberts.
Rogers Nursery Co.
Geyer Bros.
Chas. Lindley.
Scrantom, Wetmore & Co.
Stephenson & Thomas.

A great deal of fall planting will be done on the western slope this autumn. In Delta county, Colo., the fall planted trees will aggregate 200,000.

Professor L. H. Bailey has recently been investigating questions of peach yellows, fertilizing vineyards and spraying grapes.

A. Hart Norris died in Stafford, N. Y., September 1st, aged 80 years. He was a well-known nurseryman in Western New York in 1842.

TRUE LANDSCAPE GARDENING.

Attention has frequently been called in this journal to the nature of true landscape gardening. James McPherson of Trenton, N. J., Hon Charles W. Garfield of Grand Rapids, and others, have written articles upon this subject. And now Professor L. H. Bailey of Cornell University, chief of the horticultural division of that institution has issued a bulletin in which he says: "There has been little attempt in experiment literature to discuss matters of ornamental gardening. The so-called practical problems connected directly with bread-winning have necessarily and properly absorbed the energies of investigators. But the ornamentation of rural and suburban homes is quite as much within the province of experiment station work; and it should also be remembered that the growing of plants is itself an industry which enlists a vast amount of capital, and this nursery business has received little direct and explicit aid from experiment station publications. The present essay is undertaken for the double purpose of explaining certain fundamental principles in landscape gardening — a subject to which poplars readily lend themselves — and of unraveling a web of difficulties respecting the species and varieties of poplars, into which the nursery catalogues seem to have fallen. At the outset, I must be allowed to explain that landscape gardening is the embellishment of grounds in such fashion that they shall possess landscape or nature-like effects. This definition at once removes from our consideration all the formal effects of flower-beds and sheared trees, which, while useful at times, bear no closer relation to landscape gardening than a cup of paint bears to the fine art of painting."

Professor Bailey says he wishes that there were fewer Lombardy poplars in many parts of the country, fewer of the ugly white or silver poplars, and more of the American and European aspens, of the large-toothed aspen, of the cottonwood, and the Russian certinensis poplar. Taking all things into consideration, the cottonwood is probably the best of the poplars for regular ornamental planting. The so-called Carolina poplar is only a very luxuriant cultivated form of the cottonwood. As sold by the New York nurserymen it does not differ otherwise from the wild Populus monilifera of our woods and creek borders. The Lombardy poplar was much prized in this country a hundred years ago. John Kenrick established a commercial nursery of ornamental trees in Newton, Mass., in 1797, and two acres were devoted to the cultivation of the Lombardy poplar which was about the only ornamental tree for which there was any demand in those days. It is probable that few if any of the trees sold by Kenrick are still living, which is evidence that the tree is short-lived. The Lombardy has been planted too freely, but it is gradually dying out in the East, and time will no doubt eliminate its offensiveness in the landscape.

FRUIT CULTURE IN ENGLAND.

By no means the least satisfactory of the contents of the agricultural returns for 1893, published during the last few days, are the tables relating to the areas devoted to the cultivation of orchard and small fruits in Great Britain, for they prove to demonstration that the importance of fruit culture as an industry is being appreciated, and the movement which originated in 1888 with a view to improve and extend the cultivation of hardy fruits, has fully justified the views of the promotors of the great Fruit Conference at the Crystal Palace in that year says the *Gardeners' Magazine*. The results have, indeed, exceeded the anticipations of the most sanguine of them, and we have but little doubt that our friends, as well as ourselves, will have some difficulty in repressing a feeling of surprise on instituting a comparison between the returns of 1888 and those just issued, more especially if they call to mind the fact that the returns for that year showed a considerable decrease as compared with the acreage of 1887. In the case of small fruits, which comprise currants, gooseberries, raspberries and strawberries, the area has inereased from 36,734 acres in 1888 to 65,487 acres in 1893, or nearly 29,000 acres in the comparatively short period of five years. The greatest increase has been in England, the acreege in the two years mentioned being 23,776 acres and 59,694 acres respectively. In Scotland there has been an increase in small fruits of rather more than 1,000 acres, and in Wales of about 500 acres, or nearly double. As compared with the previous year, the 62,148 acres returned in 1892 have risen to 65,489 acres in 1893, the greatest extension having been in the counties of Kent, Essex, Cambridge, Sussex, Norfolk, Gloucester, Hants, and Devon. The relative increase in the average of orchard fruits is not so great as in that devoted to small fruits, nevertheless, it is sufficient to give abundant satisfaction to to those who are at all interested in their culture. In 1888, as stated in the *Garden Oracle* for 1892, orchards in Great Britian occupied 199,178 acres, whereas in June last, when the schedules from which the returns have been compiled were collected, 211,864 acres were devoted to orchards, an increase of over 12,000 acres, or an annual average increase of nearly 2,500. As compared with 1892, there was an increase in 1863 of nearly 3,000 acres, the five English counties Kent, Gloucester, Hereford, Cambridge, and Sussex alone accounting for two-thirds of it. Of the entire area now under orchards it is interesting to learn that much more than one-half lies in the contiguous group of counties formed by Devon, Somerset, Gloucester, Worcester, and Hereford. The county of Kent ranks fourth as regards the acreage of orchard fruits, and is first in the matter of small fruits with 20,458 acres, as compared with 3,809 acres in Middlesex, which is second on the list.

THE WHOLE OR PIECE ROOT QUESTION.

The question in regard to the difference in value of apple trees grafted on whole or pieces of roots was most thoroughly and fully discussed between forty and fifty years ago says the *Field and Farm*. The great apostle of the whole root theory at that time was a man widely known as "Terre Culture Comstock," who claimed that he had discovered the seat of life in plants, and its location was between wind and water, or in the crown in seedling apples. From the number of letters received lately from numerous sections of the Rocky mountains we conclude that terre culture has broken out afresh in the West, and tree peddlers are asking ten and twelve cents more a tree grafted on whole roots than those on pieces of roots. First-class apple stocks can usually be bought for five dollars a thousand, and if a whole one was used for each tree grown, it would only cost one-half cent. The entire subject may be summed up in a few words. All intelligent nurserymen use only good thrifty stocks, and if a seedling has a root long and strong enough to be cut into one, two or three pieces, and a cion attached to each, it is used; if not, the inferior sections are thrown aside, whether they come from the top or lower end. When such root grafts are planted out and make a good growth, as they usually do, no man will ever be able to tell in after years whether they are whole-root or piece-root grafted trees.

A college of horticulture has been established at the Citrus Colony, Placer county, Cal. The directors are horticulturists of practical experience. The training will be directed toward a knowledge of growing and preparing for market California fruits. To this end the following subjects will engage the attention of pupils from the first: Clearing timbered land, staking and laying out an orchard, planting the orchard, pruning, budding, grafting, irrigation, ploughing and cultivation, spraying, picking and packing for market.

WELL PLEASED WITH IT.

SPIELMAN BROTHERS, ADRIAN, MICH.—"We enclose you draft for $1.00 for THE NATIONAL NURSERYMAN. We are rather late with our dollar and hope it will come in handy. We are well pleased with the paper.

WANTED! WANTED!

Nursery Grown Stock of the following for Fall Delivery.

600	Amer. Elm,	4 to 5	inches	Caliper,	18	ft.	high.
600	" "	3 to 4	"	"	16	"	"
350	Ash "	4 to 5	"	"	18	"	"
350	" "	3 to 4	"	"	16	"	"
100	Linden,	4 to 5	"	"	18	"	"
100	"	3 to 4	"	"	16	"	"
100	Carolina Pop.,	3	"	"			

All diameters to be measured two feet above roots.

HYDE PARK NURSERIES,

W. E. BEAUDRY & CO., 5411 Woodlawn Ave., Chicago, Ill.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

SMALL FRUIT PLANTS

OF EVERY VARIETY.

Strawberries, Raspberries, Blackberries, Gooseberries, Currants.

SPECIALTIES:

EUREKA AND SHAFFER'S COLOSSAL RASPBERRY, NORTH STAR CURRANT, TIMBRELL, GREENVILLE, MUSKINGUM AND BEDERWOOD STRAWBERRY.

All Stock Guaranteed First-class and True to Name.

P. D. BERRY,

Box 412. DAYTON, OHIO.

Hardy Shrubs

AT HALF PRICE . .

We wish to give attention entirely to the Fruit Department and now offer our Ornamental Stock at prices some distance below **"ROCK BOTTOM."**

TRADE LIST NOW READY.

Fine Stock Japan Plums, Peach Trees, Grafted Nuts, Strawberries and Asparagus.

Large Stock of HEAVY KIEFFERS. Write us what you want.

The Rogers Nursery Co.,
Moorestown, N. J.

When writing to advertisers mention The National Nurseryman.

N. H. ALBAUGH, Pres't. F. G. WITHOFT, Vice-Pres't.

The Albaugh Nursery and Orchard Co.,

Headquarters for

BUDDED AND WHOLE ROOT GRAFTED **Apples, Cherries, Plums.**

AND A GENERAL ASSORTMENT OF NURSERY STOCK.

500,000 First-class Peach Trees for Fall 1894, of all the new and valuable varieties.

1,500,000 Marianna Plum stock for Fall 1894,

AT LOWEST RATES.

☞We took first premium on Diamond (trade mark) Peach at World's Fair.

The Albaugh Nursery and Orchard Co., TADMOR, . . . OHIO.

SCARLET MAPLES, 9 to 10 ft.; **NORWAY MAPLES**, 9, 10 and 12 ft.; **CAROLINA POPLARS**, 5 to 18 feet; **PEACH TREES**, including Ellison and Elberta; also **ASPARAGUS ROOTS**, 2 yrs., Barr's Mammoth and Conover's Colossal; **NORWAY SPRUCE**, 1½ and 3 ft., all fine bushy, on rented grounds. Prices low and must be moved this fall, or early next spring.

JOSIAH A. ROBERTS, Malvern, Chester Co., Pa.

When writing to advertisers mention The National Nurseryman.

OCTOBER is a good month to order your

NURSERY PRINTING.

THE OTHER GOOD MONTHS ARE

November, December, January,
February, March, April,

May, June, July, August
and September.



ELBERTA PEACHES

A GOOD COMPANY

To place your order
with is : : : :

The Gelhaar, Fleming & Fuller Printing Co., (Incorporated,)

The National Nurseryman is from our press.

ROCHESTER, N. Y.

We are in the lead with quality and prices.

APPLE TREES,
KIEFFER PEARS,
APPLE SEEDLINGS,
APPLE ROOT GRAFTS,
PEAR SEEDLINGS.

Let us Price your Wants.

F. W. Watson & Co.,

. . . . . TOPEKA, KANS.

PEACH TREES.

THESE have been a leading feature in our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varieties known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BRO. & THOMAS,

Maple Avenue Nurseries, West Chester, Pa.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years.
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine).
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,
WILLOWDALE, Chester Co., Pa.

When writing to advertisers mention The National Nurseryman.

WOODLAWN NURSERIES,

ROCHESTER, N. Y.

ALLEN L. WOOD, PROP.

Wholesale Only. **No Agents.**

Grower of

SMALL FRUIT PLANTS.

We offer for the Fall of '94 and Spring of '95, the largest and most complete collection in the United States of high grade small Fruit Plants for Nurserymen and Dealers. Special attention is directed to the following Raspberries in large quantities:

50,000 Cuthberts, Transplants.
30,000 Carolina, "
75,000 Golden Queen, "

also Brandywine, Brinckle Orange, Herstine, Marlboro, Rancocas, Thompson's Early Prolific in transplants. Also an immense lot Doolittle, Gregg, Johnson's Sweet, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's Colossal and Tyler, of extra heavy tips for Fall.

Blackberries, 100,000 Snyder, root cuttings.

Also a large lot of Agawam, Ancient Briton, Early Harvest, Erie, Eldorado, Kittatinny, Lawton, Lucretia Dewberry, Minnewaska, Taylor, Wachusett, Wilson Early and Wilson Jr.

Currants, 50,000 Fay's Pro., 2 yrs.
25,000 White Grape, 2 yrs, extra fine plants.

Also 400,000 of extra fine 1 year plants of the following: Blk. Naples, Cherry, Blk. Champion, Red Dutch, Fay's Pro., La Versailles, North Star, Lee's Pro. and White Grape.

Gooseberries, Downing, 2 yrs., extra fine plants.

Also Golden Pro. (Pearl New,) Red Jacket, Smith's Imp., Triumph and Chautauqua.

Strawberries, Eight Acres.

Millions of Plants for early Fall trade. Headquarters for the great Greenville Strawberry. Testimonials from California to the Atlantic, from Maine to Texas. The best Strawberry that has been sent out since the Wilson Albany. Send your orders to me and get them True to Name. I also have all of the other leading kinds.

Asparagus, 2 year Roots.

Millions of the following varieties: Conover's Colossal, Palmetto and Elmira.

Rhubarb, 100,000 Myatt and Victoria,

Extra fine plants. Also large stock 2 yrs. Grape Vines of all the leading kinds

☞ For miscellaneous stock look at wholesale catalogue for Fall, ready August 1st. Free.

N·O·T·I·C·E

Is hereby given that we are ready to quote "hard times" prices . . . . on . . . .

Apple. Lowest prices ever quoted. Below "rock bottom." . . . . . .

Pear. Superior in every way. No better in the market. Prices low. . . . . .

Cherry. We are the recognized headquarters for cherry. Get our prices. . . .

Plum. All the best kinds. Fine trees. "Free trade" prices. . . . . .

Peach. In great demand. Going rapidly. Leading kinds still in surplus. . . . . .

Gooseberries. Downing and Industry, very fine 2-years', first-class. Scarce. Order early . . . . . .

Etc. Grape vines, Small Fruits, Deciduous and Evergreen Trees, Vines and Shrubs. . . .

Write for special prices on the two fastest selling specialties now offered, the

Champion Peach and Shuckless Strawberry.

PLATES FREE for plate book purposes.
Write for them, stating number wanted.

THE HOOVER & GAINES CO.,

Dayton Star Nurseries, Dayton, Ohio.

When writing to advertisers mention The National Nurseryman.

FRENCH FRUIT TREE STOCKS.

Immense Stock. Large Assortment.

LENAULT HUET,

Nurseryman at Ussy, Calvados, France,

offers Fruit and Forest Trees, Evergreens, Shrubs, Roses and a general list of Nursery Stocks of finest quality and high grade, with branches at Angers and Orleans. I am enabled to supply any wants of the trade at the most moderate prices. Before purchasing elsewhere send me an estimate of your wants and learn my prices.

Special care given to grading and packing. Satisfaction guaranteed.

Address all orders and enquiries to

C. H. JOOSTEN,

3 Coentles Slip, New York.

WANTED at the proper season, prices and catalogues of Conifer Seeds.

Guaranteed to be free from Aphis or Disease.

WELL GRADED.

Send for Samples and Prices.

APPLE SEEDLINGS

ALSO

LARGE STOCK.

Osage,

Mulberry,

Honey Locust and

SHADE TREES

of all sorts.

Address YOUNGERS & CO., Geneva, Neb.

SNOWHILL NURSERIES

NOW OFFER FOR

Fall Delivery, 1894

PEACH TREES, Fine Growth and Strictly Healthy, one year old from buds, and June Buds, all the most popular varieties, including **CROSBY and CHAMPION.**

Also, 20,000 I-YEAR OLD APPLE,
2,000 NORWAY MAPLES, 8 to 9 feet,
5,000 CAROLINA POPLARS, 9 to 12 feet.
20,000 I-YEAR OLD GRAPE VINES,
500,000 ASPARAGUS ROOTS, 1 and 2 years old.

TWO MILLION STRAWBERRY PLANTS. *Price List now ready.*

Correspondence solicited. Address,

W. M. PETERS' SONS,

WESLEY P. O., WORCESTER CO., MARYLAND.

200,000 Peach Trees,

STRAWBERRIES,
RASPBERRIES,
BLACKBERRIES,

AT LOW RATES.

LADY THOMPSON Strawberry,
MILLER Red Raspberry,
MAXWELL'S EARLY Blackberry,

THE THREE COMING MARKET VARIETIES.

CORRESPONDENCE SOLICITED.

MYER & SON, Bridgeville, Del.

STARK BRO'S

Nurseries and Orchards Co.,

LOUISIANA, MO., ROCKPORT, ILL.

All *fresh* land and the very finest nursery soil. A very large general stock. Fruit trees by the million.

Staples, also many new leaders and favorites, including:

APPLE—Akin, Ark. Black, Babbitt, Jefferis, Kinnaird Choice, Nero, Paragon (Mam. Black Twig, Arkansas), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR—Bessimianka, Garber, Idaho, Koonce, Krull, Japan Golden Russet, Margaret, Pres't Drouard, etc.

CHERRY—Abbesse (Sweet Duke; best grower and hardiest Duke), Bl'k Tartarian, Improved, Cal. Advance, Ida, Montmorency Ord., Ostheimer, Suda Hardy, Windsor, etc,

PLUM—Abundance, Burbank, Clyman, Freestone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Mo. Apricot, Orient, Poole Pride. Tragedy and Golden prunes, World Beater, etc.

PEACH—Gold Dust, Northern Ap't, Sneed, Champion, etc.

APRICOTS—Sunrise, Noonday—new **large** Russians.

CRAB—Florence, Gibb, Richland Sweet, Looker Winter, etc.

GRAPES, GOOSEBERRIES, CURRANTS, BLACKBERRY, RASPBERRY, ORNAMENTAL TREES, EVERGREENS, ROSES, SHRUBS.

I Am Offering to the Trade:

2 Yr. PLUM ON PLUM 2 and 3 Yr. APPLES—Budded. 2 and 3 Yr. CHERRY—Sweet and Sour. 3 Yr. STANDARD PEARS. 2 Yr. DWARF PEARS.

The finest stock grown in this country. Orders for Car Load Lots solicited. Let me price your want list.

F. M. Hartman, Dansville, N. Y.

NIAGARA NURSERIES
ESTABLISHED 1839
PEAR TREES
AND ALL OTHER NURSERY PRODUCTS.
E. MOODY & SONS
LOCKPORT, N.Y.

SHADE TREES.

We have about 20,000 of the following Shade Trees in best of condition which we offer at low prices. Give us quantity and will reply by return mail:

Silver Maples, 2, 3 and 4 years old; extra.
Black Walnut, Mt. Ash and White Ash.
Lombardy and Carolina Poplar,
Sugar and Red Maples, Wild Cherry, Catalpas,
Evergreen, Norway Spruce, 4 to 6 ft. high.

Address, NANZ & NEUNER,

All nursery grown and transplanted. **Louisville, Ky.**

APPLE SEEDLINGS,

1,000 to Car-Load Lots.

Apple, Pear, Plum and Cherry Trees,

Evergreens and Small Fruits, Pear Seedlings.

WHOLESALE PRICE LIST IN AUGUST.

Special Quotations Now. W. A. WATSON & CO.,

Normal, Ill.

Peach Trees, Grown below the yellows line. Immense stock. Fine trees at prices **below competition. Pear, Apple, Japan Plum, Apricot, Nut and Ornamental Trees, Miller Red Raspbe ry,** the best in cultivation. Write before placing your order elsewhere.

CHAS. WRIGHT, Seaford, Del.

W. T. HOOD & Co.,

OLD DOMINION NURSERIES.

350 Acres under Cultivation. **Richmond, Va.**

FOR FALL 1894-SPRING 1895.

A very large stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs, Japan Pear Seedlings.

CELLAR, PACKING SHEDS AND BEST FACILITIES FOR HANDLING STOCK PROMPTLY.

WANTED—EMPORIA WHOLESALE NURSERIES—A partner with $2,000 cash wanted, to put into a good paying wholesale nursery in Virginia, in middle belt between North and South.

MY SURPLUS FOR FALL, 1894:

American Arbor Vitæ, 3 to 6 feet; Balsam Fir, 10 to 24 inch; Norway Spruce, 10 to 24 inch; one year old Keiffer and Garber Pears, 4 to 6 feet, strong stock; Houghton Gooseberry; Grandiflore Magnolia Seed; two and three year Concord and Ives Grape Vines, strong plants. Will sell low. Write for prices. I want lowest prices on ear apple seedlings. Address, **CHAS. S. LINDLEY, Belfield, Va.**

GEYER BROS.,

ROCHESTER, N. Y.

APPLES, PEARS, PLUMS, PEACHES, CHERRIES, GRAPE VINES. ROSES, &c.

STOCK AT LOWEST WHOLESALE PRICES.

CORRESPONDENCE SOLICITED.

GILBERT COSTICH,
Rochester, N. Y.

For Fall, '94, and Spring, '95:

STD. AND DWF. PEAR, APPLE, PLUM, CHERRY, APRICOTS, SHRUBS, EVERGREENS AND ORNAMENTAL TREES.

Lowest Price Given on Application. **GILBERT COSTICH, Rochester, N. Y.**

We Have It: Precipitated Sulphur
You Want It: Schloesing with Nicotine.

Insect Destroyer and Anticryptogamic Powder.

Radically destroys Caterpillar, Larva, Vine Fretters, Aphis and other Parasites of Agriculture, Trees, Vines and Vegetables growing. It rids Cabbage of the Caterpillar of the Pieride, Potatoes of the Doryphora, and cures Tomatoes, Peas, Lettuces, Cabbages, etc, of the Peronospora. It cures the Vine of the Oidium, Mildew, Rots, Anthracnose and other Cryptogamic diseases, destroying at the same time Insects infesting it, such as Pyrales, Altises, Attelabese, Erimose and Snails. It cleans Fruit Trees of Lanigerous Vine Fretters, of Hermes and the White Caterpillar, also Lucern of the Negril. It will keep away Ants, Grasshoppers, Locusts and Coleopterea. It protects the Vine from Grey Worms, and cures Plants of Chlorose and stimulates vegetation.

Mixing this compound with Manure will destroy Worms, and mixed with seeds, *protects same against attacks of Larva and Insects of all kinds.*

"*This is the most powerful and best Insecticide ever offered to the public.*"

Write us for prices, we want your orders, address all correspondence to

BERKHAN & OTGEN, 39-41 Cortlandt Street, New York,

Sole Agents for United States.

When writing to advertisers mention The National Nurseryman.

I have a fine lot of one year old **FAY'S CURRANTS,**

TO OFFER FOR FALL 1894 AND SPRING 1895.

Get my prices before ordering elsewhere.

FRED. H. BURDETT,
Monroe Co, **Clifton, N. Y.**

Levavasseur & Sons Nurseries,

USSY (Calvados) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

BEST GRADING QUALITY AND PACKING.

Send your List of Wants for Special Prices to

BERKHAN & OTGEN,

39 and 41 Cortland Street, = = New York.

Sole Agents for the United States and Canada,

Orleans Nurseries Co.,

ORLEANS, FRANCE.

Growers of fine Fruit Stocks, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application. . . . .

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - New York.

H. S. HURD, Nurseryman, Burlington, Ont.

APPLE, PEAR, PLUM, CURRANTS, GRAPES IN LARGE QUANTITIES, AND AT PRICESTO SUIT THE TIMES.

SEND LIST OF WANTS.



Electrotypes and Cuts

OF FRUITS, TREES, PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1,000 PAGES.

ENGRAVINGS OF NEW FRUITS MADE AT LOW PRICES.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

Berlin Nurseries,

WHOLESALE AND RETAIL.

For Fall delivery we offer the finest lot of Peach trees, strictly first-class and healthy; one year from Bud. Popular varieties including: . . . . . .

ELBERTA AND CROSBY,

300,000 Peach Trees,

300,000 Asparagus Roots,

20,000 Apple Trees,

THREE : MILLION : STRAWBERRY : PLANTS,

The finest beds in the state.

Price List Free. Correspondence Solicited. Address, **J. G. HARRISON & SONS,** WORCESTER CO., BERLIN, MD.

When writing to advertisers mention The National Nurseryman.

Syracuse Nurseries
and "Lakeside" Stock Farm.

An unusually fine lot of young, thrifty

Budded Apples, Stand. & Dwarf Pears, Plums.

A very fine line of

Ornamental Trees and Shrubs,

suitable for **LAWNS** and **PARKS**, and a very large exceptionally choice list of

Roses.

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well graded, young, and thrifty stock and that which is true to name.

—OUR—

Live Stock Department

Is replete with **HORSES** and **CATTLE** of all ages and both sexes, of the following breeds.

STANDARD BRED,
FRENCH AND AMERICAN COACH,
LEVELAND BAY,
HACKNEY,
CLYDESDALE,
PERCHERON.

and Driving, Coach, or Carriage Horses, single or in pairs.

— ALSO —

Holstein Friesian Cattle

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

SMITHS & POWELL CO., Syracuse, N. Y.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

. . BRIGHTON, N. Y. . .

I have to offer for Fall, 1894 and Spring, 1895, the following strictly first-class stock:

75,000 Apple Trees,	**25,000 Standard Pears,**
10,000 Dwarf Pears,	**15,000 Plum Trees,**
15,000 Cherry Trees,	**10,000 Peach Trees.**

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

John Charlton, University Avenue Nurseries,

ESTABLISHED 1865.

ROCHESTER, N. Y.

I Offer for Fall 1894.

Clematis.—Strong plants. Own growth. Jackmanii; Fair Rosamund; Miss Bateman; Seiboldü Hybrida (Syns. **Peter Henderson? Ramona??**); Duch. of Edinburgh; Crispa; Coccinea.

Dutch Pipe.—Strong, heavy-rooted plants.
Honeysuckle.—Hall's Japan, Monthly Fragrant.
Ampelopsis Veitchii American Ivy.
Japan Snowball.—Strong, fine plants.
Roses, H. P's and Mosses.—Strong plants, own roots and budded.
Tea Roses.—Fine plants, 4 inch pots.
Tree Roses.—Elegant plants. Low price.
Oak-leaf Mt. Ash.—Elegant trees. Low price.
Weeping Mt. Ash.—Fine heads.
Cut-leaf Birch.—8 feet, perfect trees.
Purple Birch.—4 feet, **true purpurea.**
Young's Weeping Birch.—5 feet stems.
Lilac, Weeping Pendula.—5 feet, not budded on lilac.
Hydrangea P. G.—A fine lot of strong plants.
Flowering and Foliage Shrubs.—Fine assortment.
Paeonies.—A grand collection.
Paeonies, Tree.—Nice plants in quantity.
Gooseberries.—In variety; 2 year Plant.
Blackberries.—Strong, nicely trimmed to one cane.
Currants.—Tree and bush formed. Fay's Prolific, White Grape, Champion, Lea's Prolific, Cherry, North Star.
Grape Vines.—A complete assortment.
Fruit Trees.—All kinds in abundance.

NO CATALOGUES. Write for prices.

JOHN PALMER & SON, Ltd.,

Annan Nurseries, - - Dumfriesshire, Scotland.

Have for FALL and SPRING SHIPMENT an IMMENSE STOCK of . .

INDUSTRY GOOSEBERRIES, one, two and three years, carefully selected and well graded.
Whitesmith, Crown Bob, and Lancashire Lad Gooseberries, No. 1 stock.
H. P. and Moss Roses, best sorts, strong and good.
Tree Roses, good bushy heads, good roots.
New Polyantha Rose, "Crimson Rambler," the finest of its class in the world.
New Hybrid Sweet Briers, a sterling novelty.
Clematis Jackmannii, and other most popular varieties, two-years, strong plants.
Rhododendron, hybrid grafted, best and hardiest sorts from one to three feet.
Rhododendron Ponticum, well set with flower buds, all sizes, very cheap.
Manettii and Multiflora Rose Stocks, well rooted.
Norway Maples, 18 to 24 in., two to three and three to four feet. Straight trees, carefully transplanted.
Cut-leaved Weeping Birch, two to three, three to four, and four to five feet.
Mountain Ash, Scotch Larch, Birch and Elms, Beech, Linden, California Privet, Norway Spruce, Austrian and Scotch Pine, Hydrangea Paniculata Grandiflora, and a general line of stock of the best sizes for export.

Lowest Through Rates to all points in the United States and Canada.

Catalogues Free.

Write for prices before ordering elsewhere.
Correspondence and early orders solicited.

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines. . . . . .

(In Car-load Lots.)

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb. . . . . .

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beach, Cut-leaf Birch, Catalpas Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows. . . . . .

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers. . . . . .

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc. . . . . .

TREE ROSES . .

Hybrid Roses, Tea Roses, Climbing Roses, Moss Roses, Azalias Rhododendrons, Clematis, Industry Gooseberry. . . . . .

Send list of your wants for prices.

W. & T. SMITH CO.

GRAPE VINES

NIAGARA All old and new varieties. Extra quality. **Warranted** true. *Lowest rates* Introducers of the

EATON.

Also other SMALL FRUITS. Descrigtive Catalogue Free. T. S. HUBBARD CO., Fredonia, N.Y.

ESTABLISHED 1852.

Phoenix Nursery Co.,

600 Acres. . .
13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMN A ND FLORISTS — Wholesale and Retail.

Correspondence solicited and promptly answered.
Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. . . . **BLOOMINGTON, ILL.**

The SPARTA NURSERIES

Always have in stock their Dry Baled Moss. Same quality in bulk.

The Finest Grade of Strawberry, Rasperry and Blackberry Plants Ever Offered. Write for prices.

Sparta, Wis., Aug. 1, 1894. . . **Z. K. JEWETT & CO.**

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received. L. G. THOMPSON.

Write me for easy terms and prices. TOMAH, WIS.

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

—ESTABLISHED 1780.—

BRAULT & SON, Directors,
ANGERS, FRANCE.

SPECIALTY • OF • NURSERY • STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS,
MAGNOLIAS, LILAC, ETC. . . . .

AGENT FOR UNITED STATES AND CANADA.

ANDRE L. CAUSSE,

105 and 107 Hudson St., New York City.

THOS. KENNEDY & SON, offers the Largest Stock in Livingston County, of

DANSVILLE, N. Y.,

APPLE, STANDARD AND DWARF PEAR, PLUM, CHERRY, AND QUINCE FOR FALL '94 AND SPRING '95.

WRITE US FOR PRICES *as our LOW PRICES*
BEFORE PLACING YOUR ORDER, *will SURPRISE YOU.*

Nurserymen's Stock Book.

COMPLETE AND PRACTICAL.

Size, 16x21 inches. 58 pages. Heavy Ledger Paper.

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,
ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.

The Farmers Nursery Co.

OFFER FREE OF CHARGE

GREENVILLE AND CROSBY PLATES FOR USE IN PLATE-BOOKS.

Also at Low Figures for agents use in Retail Trade, Mounted Lithograph Display Calendars, of Greenville 14 x 22 inches, and Lithograph Plate Circulars of Greenville, 6 x 9 inches. . . . . .

SAMPLES AND SPECIAL CATALOGUE OF ABOVE FRUITS SENT ON APPLICATION.

For Fall and Spring Trade

WE WANT

5,000 Downing Gooseberry, 2 year, No, 1.
5,000 Houghton " " "
10,000 Concord Grape, " "
1,000 Worden " " "
1,000 Fay's Currant, " "
1,000 Fay's " 1 year, "
5,000 Kansas Raspberries.
5,000 Palmer "
2,000 Earheart "
2,000 Hilborn "
2,000 Shaffer "
1,000 Taylor Blackberry.
1,000 Early Harvest Blackberry.
500 Eldorado "
1,000 Beverly Strawberry.
2,000 Wilson's Albany Strawberry.
2,000 Lovett's Early "
1,000 Apple Seedlings, No. 1. Branched roots.
15,000 Marianna Seedlings, No. 1. $\frac{3}{16}$ and up.
100 Orange, 100 Meech and 100 Champion Quince, No. 1, 4 to 5 feet.
100 Prunus Simonii, $\frac{3}{4}$ up, 5 to 6 feet.
50 Pyramidallis, $3\frac{1}{2}$ feet.
25 Sweet Chestnut, 4 to 5 feet.
25 O. L. Mt. Ash, 5 to 6 feet.

WE OFFER

715,000 Strawberry Plants, healthy, tied in bunches of 25. Runners taken off and each bunch labeled.
400,000 GREENVILLE,
50,000 Haverland.
50,000 Warfield No. 2.
30,000 Bubach No. 5.
30,000 Crescent.
10,000 Swindle.
5,000 TIMBRELL.
5,000 Grandy.
5,000 Enhance.
10,000 Burt.
10,000 Parker Earle.
30,000 Cumberland.
30,000 Dayton.
50,000 Beder Wood.

PEACH.

5,000 Crosby.
1,000 Champion.
2,000 Elberta.

CHERRY.

5,000 Sweets, 2 years, No. 1.
5,000 Sour, " " "

ROSES.

250 Baltimore Belle, 2 years, No. 1.
150 Madame Plantier.

We guarantee varieties True to Name. Plants well rooted and carefully packed.

Any Reasonable Exchange Offer will be accepted.

List of wants is at our option Fall or Spring and stock offered by us at option of purchaser.

SPECIAL RATES ON LARCE ORDERS.

The Farmers Nursery Co.,

TADMOR, OHIO.

600 Acres.

Brown Brothers Co.,

Continental Nurseries,

- - Rochester, N. Y.

Leading American and Canadian Nurseries.

If you need anything in the Nursery line, write us.

Careful Grading. Superior Packing.

Prompt Shipment. Eight Greenhouses.

Try Our Standard Pears.

Four Offices.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

U.S. DEPARTMENT OF AGRICULTURE
RECEIVED
DIVISION OF STATISTICS

THE NATIONAL NURSERYMAN

December, 1894.

PAINESVILLE NURSERIES.

Fruit and Ornamental Trees,

Small Fruit and Grape Vines,

Shrubs, Roses and Bulbs,

Hardy and Tender Plants.

LARGE ASSORTMENTS NEW AND OLD VARIETIES.

UNEQUALED FACILITIES FOR PROMPT AND ACCURATE FILLING OF ALL ORDERS, LARGE OR SMALL. NO BETTER PLACE FOR NURSERYMEN TO SORT OR DEALERS TO PACK. IMMENSE CELLARS AND PACKING HOUSES. ORDERS BOOKED THIS FALL AND CARRIED IN CELLAR FOR EARLY SPRING SHIPMENT.

DECIDUOUS, UPRIGHT AND WEEPING TREES.

Large Stock of Splendid Trees at Low Rates, of

POPLARS—Carolina, Lombardy and Golden. MOUNTAIN ASH—European, Oak-leaf and Weeping. ALDER—Imperial, Cut-leaf and European. WILLOWS—Kilmarnock, New American, Rosemary, Babylonica, Laurel-leaf and Gold Bark. ELMS—American, Scotch, Red, Purple-leaf and Camperdown. LINDEN—European, Silver and Weeping. MAPLES—Silver, Norway, Ash-leaf, Wier's, Schwedlerii, etc. MAGNOLIAS — Acuminata, Soulangeana, Speciosa, Pupura, etc. MULBERRIES—Teas' Weeping, Russian, White and Black. Balm of Gilead, Purple Beach, Catalpas, Horse Chestnut, Larch, Russian Olive, Tulip, Flowering Thorns, etc., etc.

NUT TREES

HEAVY STOCK, ALL SIZES.

CHESTNUT—American, Spanish and Japan. WALNUTS—Black, English and Japan. BUTTERNUTS English Filberts, Shell Bark Hickory, Almonds, Pecans, etc.

ROSES.

LARGEST STOCK IN THE U. S.

Hybrid, Perpetual, Moss and Climbers; strong field grown; better and cheaper than imported.

TREE ROSES for Fall Delivery; very fine.

BULBS for Fall Trade direct from the best Holland and French growers.

Highest Quality at Lowest Rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. 1000 ACRES. 28 GREENHOUSES.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

THE LEADING NURSERY OF AMERICA.

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

ELLWANGER & BARRY, Proprietors.

Founded 1840.

Hardy Trees and Plants

OF EVERY DESCRIPTION.

FRUIT TREES.

SMALL FRUITS.

GRAPE VINES.

DECIDUOUS, ORNAMENTAL AND SHADE TREES.

EVERGREENS.

HARDY FLOWERING SHRUBS.

HARDY PLANTS.

HARDY ROSES.

GENERAL DESCRIPTIVE CATALOGUE superbly illustrated, also Wholesale List for the Trade—FREE.

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

Kawana, Mitchell Co., N. C.

(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

STANDARD AND DWARF PEAR,

APPLE, PLUM, CHERRY, RUSSIAN APRICOTS,

CUT-LEAVED WEEPING BIRCH.

And Low Budded Roses on Manetta Stock.

Prices Low and Stock Good.

Special Prices on Car Lots.

JAY WOOD,

KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

Newark, Wayne Co., N. Y.

Growers of

GHOICE SPECIALTIES

For Nurserymen and Dealers.

"GENEVA, N. Y., June 28, 1894.

"JACKSON & PERKINS, Newark, N. Y.:

"Gentlemen:—We were well satisfied with the character and grade of the Roses which you shipped us this past spring. *Of the 20,000 plants, we were not obliged to reject any.*

"Yours very truly,

"R. G. CHASE & Co.,"

☞Used by permission.

OUR SPECIALTIES ARE

ROSES AND FINE ORNAMENTALS.

BUT WE ALSO GROW A GOOD ASSORTMENT OF GENERAL NURSERY STOCK.

GET OUR PRICES ON YOUR WANTS IN ALL LINES.

N. H. ALBAUGH, Pres't. F. G WITHOFT, Vice Pres't.

The Albaugh Nursery and Orchard Co.,

HEADQUARTERS FOR

Budded and Whole Root Grafted Apples, Cherries, Plums,

AND A GENERAL ASSORTMENT OF NURSERY STOCK.

500,000 First-class Peach Trees for Fall 1894, of all the new and valuable varieties

. . AT LOWEST RATES, . .

☞We took first premium on Diamond (trade mark) Peach at World's Fair.

THE ALBAUGH NURSERY AND ORCHARD CO.,

TADMOR, OHIO.

SCARLET MAPLES, 9 to 10 ft.; **NORWAY MAPLES,** 9, 10 and 12 ft.; **CAROLINA POPLARS,** 5 to 18 ft; **PEACH TREES,** including Ellison and Elberta; also **ASPARAGUS ROOTS,** 2 years, Barr's Mammoth and Conover's Colossal; **NORWAY SPRUCE,** 1½ and 3 ft., all fine bushy, on rented grounds. Prices low and must be moved this fall, or early next spring.

JOSIAH A. ROBERTS, - MALVERN, CHESTER CO., PA.



Electrotypes and Cuts

OF FRUIT TREES,
PLANTS, ORNAMENTALS FOR
Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1000 PAGES.

Engravings of New Fruits made at Low Prices.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

When writing to advertisers mention The National Nurseryman.

1865. 1895.

JOHN CHARLTON,

University Avenue Nurseries,

ROCHESTER, N. Y.,

Offers for Spring of 1895, my own growing,

6,000	CLEMATIS,	Paniculata.
3,000	"	Jackmannii.
2,000	"	Miss Bateman.
2,000	"	Fair Rosamond.
3,000	"	Ramona.
1,000	"	Mad. Ed. Andre. New Red.

20,000 H. P. ROSES (own roots and budded.)

Industry, Whitesmith, and Keepsake Gooseberries.
Std. and Dwf. Pears, Plums, Cherries, Apples, Etc.

Ornamental Trees, Flowering Shrubs, Etc.

WRITE FOR PRICES.

ON ACCOUNT OF THE GROWING DEMAND FOR WHOLE ROOT GRAFTS, we have prepared ourselves to furnish those who incline to that kind of a root graft, and are pleased to say that we will make the prices so that those can afford to buy, who, heretofore, have felt the price beyond their reach.

We would have you understand that the whole root or crown graft that we offer this season will be such a graft in every sense of the word They will be made on No. 1, 3-16 inch and up, branched seedlings, having the first and only cut from same, with a system of short side roots.

REMEMBER, no orders for this particular grade of grafts will be accepted after January 15, 1895. For this, legitimate reasons can be given upon application.

Write for prices and samples.

Our regular piece root graft will be of superior quality this season, and yet the price no higher. We wish especially to call your attention to this branch of our business.

Address,

H. C. GRAVES & SONS,

LEE'S SUMMIT, MO.

The North Star Currant.

The Best Grower . .
The Best Fruiter . .
The Best Seller . . .
The Best Red Currant

On Earth To-Day.

THE "NORTH STAR CURRANT" is a rapid grower, a very prolific bearer of large fruit, of a sweet delicious flavor, and yields a *sure crop* every year. The fruit does not shell or drop off nor does it scald. The "NORTH STAR CURRANT" has more strong selling points, backed by genuine merit, than any other specialty on the market to-day.

IF YOU WANT something new that will secure orders *with good margins*, try the "NORTH STAR." For full information and reduced prices, write the introducers.

The Jewell Nursery Co.,

LAKE CITY, MINN.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, France.

A general assortment of **Fruit Tree Stocks**, such as **Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc.** The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U. S America and Canada.

C. C. ABEL & CO., P. O. Box 920, NEW YORK.

Special Bargains

. . ON . .

Eleagnus Longipes.

Large Stock of Fine Plants One Year Old.

PRICES ON APPLICATION.

BERKHAN & OTGEN,

39-41 Cortland St., NEW YORK.

Apple Seedlings

Write for Prices.

Can supply all grades in **Straight** or **Branched Roots**, as wanted. Grades and quality unsurpassed. No disease or insects guaranteed. Plants are grown on new, rich upland prairie.

Address, **J. A. GAGE, Fairbury, Neb.**

NATIVE AMERICAN PLANTS.

AN EXTRA FINE STOCK OF

NATIVE AZALEAS—five kinds, including VASEYI, RHODODENDRON maximum, KALMIA latifolia, ANDROMEDA arborea, DOGWOOD, HOLLY, STUARTIA, etc.

LOW PRICES! Wholesale List sent on request.

Can use some Fruit Stock in exchange.

ALTIFIRMA NURSERY, **Russell Bros.,** HIGHLANDS, N. C.

In Car Load Lots.

Apple, Carolina Poplar,
Cherry, Silver Maple.

ALSO A GENERAL ASSORTMENT OF OTHER STOCK.

PEACH, PLUM, PEAR (Standard and Dwarf), GOOSEBERRIES, CURRANTS, and other SMALL FRUIT AND ORNAMENTAL TREES AND PLANTS.

Complete List of Varieties;

Stock Young, Thrifty, and of Best Quality;

Carefully Graded and Handled.

Write for SPECIAL PRICES in CAR LOAD LOTS. Personal inspection courted. SPADES—see Trade List.
Trade List ready Feb 15th.

ALBERTSON & HOBBS,

BRIDGEPORT, Marion County, = = = = INDIANA.

Ornamental . . . . . LARGE SMALL TREES,

FLOWERING SHRUBS in great variety. Descriptive Catalogue and Price-List free.

SAMUEL C. MOON, Morrisville, Bucks County, Pa.

WANTED, A MAN, experienced in handling Agents, to take charge of a retail Nursery Business. Good inducements to the right person. Address, "ROCHESTER," care *National Nurseryman*, Rochester, N. Y.

Strong 2-Year

GEN'L JACK. ROSES,

On Own Roots at Low Prices.

C. L. YATES,

ROCHESTER, N. Y.

THE BATAVIA LABELS

ARE the smoothest, clearest and best in the market. We manufacture a complete line of labels and stakes suited to every purpose, ranging in size from 2½ in. to 4 feet. Our printed wired labels are cheap and popular, and are TIME SAVERS. We have special express rates and *Chicago freight rates*. Send for free samples and catalogue.

Special Prices on early printed orders in large quantities.

WILLIAMS & SONS CO., - - BATAVIA, ILL.

STOCK WANTED.

Quote us rock bottom prices on Apple Trees, Pear Trees, Plum Trees, Cherry Trees, Peach Trees, Hardy Shrubs, Grape Vines, Etc., as we are in the market to buy for Spring.

THE ROGERS NURSERY CO., - MOORESTOWN, N. J.

Berlin Nurseries,

WHOLESALE AND RETAIL.

For Spring Delivery we offer a superior lot of STRAWBERRY PLANTS, in quantity and quality unequaled, tied 50 in a bunch, packed in light baskets in moss.

M.		M.		M.	
100	Berlin.	50	Greenville.	100	Parker Earl.
100	Beeder Wood.	100	Hoffman.	20	Philips Seedling.
100	Barton's Eclipse.	300	Haresland.	5	Princess.
10	Bidwell.	100	Hyslop.	100	Saunders.
10	Boynton.	10	Iona Beauty.	200	Sharpless.
100	Bubach, No. 5.	50	Jessie.	5	Swinale.
50	Capt. Jack.	50	Lady Thompson.	5	Southward.
300	Crescent.	50	Kentucky.	100	Stayman's No. 1.
200	Edgar Jessen.	50	Lovetts.	50	Van Dieman.
20	Eureka.	100	Mammoth Sharpless.	100	Wilson.
200	Enhance.	300	Weeks' Early.	500	Warfield.
200	Gandy.	300	Mitchels.	50	Wolverton,
50	Gen. Putman.	100	Mrs. Cleveland.	and other New Varieties.	

Catalogue Free.

500,000 ASPARAGUS ROOTS.

BERLIN NURSERIES, - - - - - BERLIN, MD.

Baltimore and Richmond Nurseries

Offer for Fall '94, and Spring '95, large stock of the following:

Apple, Peaches, Plum (Japan and others) **Apricots, Nectarines, 1-Year Standard Pear** (heavy on Kieffer, Garber and Clapp's Favorite), **Grape, Asparagus, Strawberries, Osage Orange, Shade Trees, Evergreens, Shrubs, Etc., Etc.**

Well-Graded Stock! Prompt Shipment.

SATISFACTION GUARANTEED.

Special attention to growing Peach Trees of which we have the usual quantity. We are prepared to give prices to suit the times.

FRANKLIN DAVIS NURSERY CO.,

BALTIMORE, MD.

"Nice lot of Smock and Promiscuous Peach Pits" for immediate shipment.

PRICES ON APPLICATION.

1838. **56 Years. 300 Acres.** 1894.

Established 1838.

New Apple, Pear and Nut Trees.



Starr, Parlin, Paragon and other Apples.

Lincoln Coreless, Seneca, Japan, Golden Russet, Vermont Beauty and other Pears.

Parry's Giant, Pedigree Mammoth, Paragon and Numbo Chestnuts.

French, Persian, English, Japan Walnuts.

Pecans, Almonds and Filberts

NOVELTIES. **Eleagnus Longipes, 5,000 Matrimony Vines, 10,000 Trifoliate Orange, 5,000 Japan Wineberry, Imperial Dwarf Rocky Mountain Cherries, Buffalo Berries, Juneberries, Downing and Hicks Mulberries 1 and 2 years old in large supply.**

SMALL FRUIT PLANTS.

IMMENSE STOCK OF SILVER MAPLES, LOMBARDY AND CAR. POPLARS AND OTHER SHADE TREES. CATALOGUE FREE.

Pomona Nurseries,

WILLIAM PARRY, PARRY, N. J.



RESIDENCE OF SEC'Y H. W. FREEMAN.

OFFICE AND COLD STORAGE BUILDING.

FARMER'S NURSERY CO.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by the National Nurseryman Publishing Co.

U.S. DEPARTMENT OF AGRICULTURE RECEIVED DIVISION OF STATISTICS

VOL. II. ROCHESTER, N. Y., DECEMBER, 1894. NO. 11.

MODEL STORAGE AND PACKING HOUSE.

The frontispiece of this issue presents a view of the cold storage building and packing house of The Farmers Nursery Co., at Tadmor, O. To the left of this building is the residence of H. W. Freeman, secretary of the company, under whose management it has achieved a national reputation as the disseminator of the leading fruits—the Crosby peach and the Greenville strawberry. The secretary is the designer of the storage cellar and packing house named. Probably no nurseryman has a more attractive, convenient and serviceable building. The cellar is 24x60 and 10 feet in height. The wall is two feet thick and contains two windows at each end and two on the north side. The openings, 3 x 3½ feet, give plenty of light and ventilation, as well as good service in storing stock. The cellar has an inside and outside stairway, the one to the packing floor above and the other to the packing ground, which is on the south side of the building and on a level with the packing floor notwithstanding the depth of cellar. The north and east wall has an exposure of 3 feet 8 inches to make room for the windows. This also permits wagons to drive along the north side and be loaded without lifting heavy boxes and bales, from the large sliding door in center of side. There is no exposure of wall at the west end, except that required for the windows, the slight incline needed for the driveway protecting the wall. At the south there is no exposure, so that the cellar is practically frost proof each cellar window being protected by doors. Looking from the packing house floor are two windows at each end and two at each side. There is an ordinary door on the north side, near the west end, and there are two sliding doors on the south side, one for driveway and the other for convenience in packing stock and storing or receiving it from the cellar, as at this point there is a large trap door in the cellar floor, through which trees can be dropped from the puddle hole just outside the sliding door.

The drainage is good, as a tile runs all around the wall and is received by a large tile, 25½ inches in diameter, that takes the place of a former ditch between the secretary's residence and the office—annexed to the south side of the main building. This office takes up a space in the main building of 6 x 18 feet, and extends southward nineteen feet. It is divided into two rooms, with the secretary's desk so situated that he has a good view of either the packing floor or packing ground without moving his position, while one of the office doors opens upon the packing floor and the other upon the packing ground.

While this company is having a heavy run on the Crosbey and Greenville, and on the Kansas and Eureka raspberries, it also grows a general line of nursery stock, and at this writing is offering as fine 3 year apple and 2 year cherry and plum, etc., as can be produced. Like other Miami Valley nurserymen these keep abreast of the age in introducing and disseminating fruits of merit. The fact that a fruit is being pushed to the front by them is sufficient guarantee to nurserymen of its value.

AMERICAN POMOLOGICAL SOCIETY.

The twenty-fourth biennial session of the American Pomological Society will be held in Sacramento, Cal., on January 16th, 17th and 18th, at the invitation of the California State Board of Horticulture.

It is requested that all who intend to meet with the society in Sacramento, will so inform the secretary at as early a date as practicable, in order that the California friends may be informed of an approximate of the aggregate number of attendants to be provided for at the hotels and places of entertaining, which have promised to give reasonably reduced rates. Also, to enable the committee working for reduced fare rates to report the probable number to railroad passenger associations, which may influence a more favorable action by them. Furthermore, all present members are kindly urged to renew their membership, and to secure as many additional members as possible before or during the time of the session, so as to enable the treasurer to meet the expenses of publishing the volume of transactions of the meeting without delay.

All persons who desire to join the excursion and participate in the courtesies offered by the California State Board of Horticulture must qualify themselves as members of the American Pomological Society, by remitting either the biennial-membership fee of $4 or life-membership fee of $20 to the treasurer, Benjamin G. Smith, Cambridge, Mass., who will upon receipt of the fee issue a certificate of membership, which will entitle the holder to all the privileges offered to members of the society.

This session of the society at Sacramento promises to be one of the grandest events in the history of American pomology. Eminent pomologists, representing the art in all its most recent developments, and their successful application to all lines of practice, are expected to gather at this convention from all parts of the United States and the Canadas, and will present papers on important topics for consideration and discussion. The results of the work of such an assemblage cannot fail to be interesting and of great value to all present—a veritable collection of knowledge upon all that relates to the present pro-

gressive work of advanced and advancing pomology. The secretary of the California State Board of Horticulture has well and truly said in his letter of invitation: "No member of the society can afford to remain away, as a rare treat will await him."

The officers of the society are: President, Prosper J. Berckmans, Augusta, Ga.; first vice-president, C. L. Watrous, Des Moines, Ia.; secretary, G. C. Brackett, Lawrence, Kan.; treasurer, Benjamin G. Smith, Cambridge, Mass.

IN HONOR OF S. REYNOLDS HOLE.

American horticulturists honored Rev. S. Reynolds Hole, Dean of Rochester, England, the great English rosarian, at a dinner at the Hotel Savoy, New York city, on November 14th. Those present besides the guest of the evening were: W. C. Barry, of Rochester, chairman; Charles A. Dana, editor of the New York *Sun*; Messrs. W. F. Dreer, Robert Craig, Joseph Heacock, Alex. Scott, Howard Earle, all of Philadelphia; Andrew H. Green, Judge Addison Brown, Dr. H. D. Noyes, Dr. Thompson, of Conn.; S. Parsons, superintendent of Central Park; Charles Henderson, of Peter Henderson & Co.; W. J. Stewart, secretary Society American Florists; John N. May, C. L. Allen, P. O'Mara, A. T. De La Mare, James R. Pitcher, F. R. Pierson, Samuel Henshaw, J. N. Gerard, Charles H. Allen, C. B. Weathered, W. A. Manda, John Young, S. C. Nash, John H. Taylor, Thomas Young, Jr., Ernst Asmus, H. A. Siebrecht, C. Thorley and W. Armstrong.

The bill of fare bore the emblem of a rose and the deanery at Rochester, England, with cathedral in the background. Under the design was the motto, "Floreat Regina Flora." Chairman William C. Barry in welcoming Dean Hole, said:

"We are assembled here this evening to do honor to England's greatest rosarian. I think I am fully justified in asserting that no horticulturist coming to these shores will receive a more cordial welcome than Reynolds Hole.

"We have often been with him in spirit as we have read and re-read his interesting and instructive books, and few of us, perhaps, ever expected that an opportunity would be afforded to meet him in person. But here we are face to face, and we beg to assure him in the strongest terms we are capable of uttering, that his visit to us is a source of unbounded pleasure.

"My dear sir, this gathering enables you to form but a faint idea of the sentiments of esteem and affection which are manifested towards you by every horticulturist in America. Were not the distances which separate us so great, many, a great many more would have been here on this occasion to meet and to greet you.

"American horticulurists fully appreciate your grand work for rose culture, in creating an interest in and love for the 'Queen of Flowers;' by your writings, by your addresses and by your zeal you have done more than any other man to secure for the rose the recognition to which she is justly entitled, and in doing so you have been the means of bringing joy to many a household where sorrow and discontent would otherwise have been. Through your wise counsel and loving advice, perpetual sunshine reigns now in many a home which otherwise would have been in darkness. Through your persistent efforts, extending over a period of many years, rose culture has made many strides, and now the 'Queen of Flowers' has won her way to popular favor everywhere and commands admiration from every one.

"I remember well the grand rose exhibitions in England, where thousands upon thousands of blooms were massed and staged for the gratification of an admiring public, and the interest taken in these exhibitions is not confined to any particular class, but is general; rich and poor alike crowd the exhibition halls, enjoying with a discriminating taste the beautiful pictures placed before them. Around the prize stand groups of admirers gather, and evince by their remarks and criticisms the high standard of intelligence they possess as regards the rose and its culture.

"To you, sir, should be attributed in a large degree the credit for this happy consummation. Could we but have a Dean Hole in America to arouse enthusiasm, to encourage and advise us, we too could have a Rose Society, which in its way, and to some degree, might accomplish the much desired result. But it is not my intention to occupy more of your time, for there are others who can tell you far better than I can, the degree of satisfaction we have in meeting you, and the deep interest we take in all that concerns you, especially now while you are sojourning in the states. May I ask the Very Rev. Dean Hole to respond?"

Dean Hole responded in a happy vein, saying among other things in a reminiscent mood: "I remember so well longing to know the great gardeners of the country, and the interest with which I first met such men as Thomas Rivers, of Sawbridgeworth, who had done so much for the cultivation of fruits in England, and Charles Turner, of Slough, another nurseryman. Then I remember so well the joy that I felt in being allowed to originate the first 'rose show'—the first that perhaps was ever held in Europe or America, of roses only. I remember the delight with which these men responded, and how, in St. James' Hall, I gave away 36 silver cups to the successful prize winners, two of them to myself. And I remember the old Yorkshire gardener who was with me, said: 'Sir, when tha took these two coops to thysen, Aa thowt tha'ood'st 'a gone straight oop to 'Ev'n.' But I was not ready and so I stayed upon earth and then had another great delight, that which was given to me from the love of my heart to write a little book about roses, and the older I grow the more thankful I feel to Him who giveth all, that I have been allowed to do good to my fellowmen, as has my dear friend and brother, Mr. Ellwanger, whose partner has come some 360 miles to meet me to-day (we met once on the other side of the Atlantic). I have the happiness of thinking that it has

been given to me most unworthy, as it has been given to so many of you, not only to enjoy things beautiful yourselves, but to promote the love of beauty.

"It is a source of gratitude to me that I have in some little measure been allowed to promote happiness by the love of flowers. We know what it is, and we know what a gracious permission it is to extend to those who have not much of an inducement to grow flowers, to excite the love and to instruct the ambition. Well, then, I remember of the very great joy which the rosarians of England, professional and amateur, gave me, when they presented me with a piece of plate, which I value more than anything I have in that form—a very beautiful silver urn, from these, my brothers. So you will see how much joy I have had from my love of the rose."

Robert Craig of Philadelphia in response to the toast, "The Rose," said: "Before I say a word about the 'Queen of Flowers,' permit me to express the thought which is uppermost in my mind, and which, I take it, is uppermost in the minds of all who are here, and that is one of gratitude that we are permitted to be here to-night to meet the genial, kindly, thoughtful man whom we have before learned to love and to revere. Dean Hole comes not to America a stranger; his charming book has preceded him, and we have all read it with delight, time and time again. We have enjoyed the delicate vein of humor in these pages, and the beautiful sentiments with which he has entwined his remarks about the flower he loves so well, and we have profited, too, by the practical information, the immense amount of it, in the pages of that book. I take it that none of us practical growers to-day can tell of anything that will furnish him with more practical information than Dean Hole's 'Book About Roses.'

"In America we have to depend on a very few varieties in the open air to get a profusion of bloom. I may mention as a worthy rose which does well here Alfred Colomb; (in the fall of the year, in the cool, clear nights in the early part of October we do get exquisite blooms of that variety), Paul Neyron, Countess of Oxford and some few other kinds, but most of the out-door kinds do very imperfectly here. Papa Gontier, which is not thought of as coming up to the standard of perfection reached in other roses in England, is a very useful rose here in America. It will grow and flower well all through the summer, and is particularly beautiful in the cool nights of the fall. Kaiserin Augusta Victoria is another rose that does well in America. I recollect, thirty years ago, when I was a boy, in Philadelphia, we used to grow the old rose Mrs. Bosanquet and others of that type, Souvenir de Malmaison and Multiflora. In one year, from small plants planted out in the spring, we could grow plants three feet high and two feet through, covered with flowers the whole season, but late years we cannot do that. The trouble seems to be a fungus known as the 'black spot,' which attacks most of our outdoor roses and prevents them growing as they did in days of yore. But we can grow roses in the winter time. I wish Dean Hole could be with us in January and February to see the marvelous Ulrich Brunners, Mrs. John Laings and Baroness Rothchilds that are grown in this country. I think he would admit that they compare favorably with the roses grown in England in the summer time.

"She is no doubt the 'Queen of Flowers,' and has been admitted to be so, through all ages and through all times; poets have written about her; the greatest minds of all ages have found their best recreation and their keenest enjoyment in the cultivation of the rose; and it is certainly a very important thing for us to inculcate in this country, as best we may, a love for the 'Queen of Flowers.' We need in this country a society devoted to the rose—an organization. We have in America, as an outgrowth of the Society of American Florists, a special society called the Carnation Society, and another one, the Chrysanthemum Society; and recently at the convention at Atlantic City there was organized a Rose Society. Without my knowledge or consent, I was elected president of that society. We have not been able yet to do much practical work; but we hope to gather together, in the near future, funds which we may devote for the purpose of developing rose culture in America. I see no reason why liberal premiums should not be given for seedlings of American origin. Very little has been done in that direction here. But there have been some famous roses raised here in America; I may mention Cornelia Cook as one American rose which is in the very first rank, and I think all it needs is an incentive to growers to set them to work to produce roses which will be equal to any grown in either France or England. I hope that every gentleman here will give some little thought to the matter of a Rose Society in America, and will make a little sacrifice to advance its interests.

"I might wish, with your chairman, that someone like our distinguished guest to-night may rise up in this country with something of *his* character, something of *his* enthusiastic love for the rose, who may write as he so charmingly does for the common people to get them interested. I can think of no one thing that would advance the culture of roses in America more than the presence of such a person. Let us hope that we may meet him soon."

Charles A. Dana, editor of the New York *Sun* was introduced by Mr. Barry as "a man whose love for horticulture is manifested in the most focible manner at his home—Dosoris, where the rarest and most beautiful trees, shrubs and plants are to be found growing with a vigor which indicates exceptional skill and care in the management. I divulge no secret in saying that each tree and shrub has for him a particular interest; they are friends whose company he enjoys, and we are proud to say that the leading editor in America is also the leading horticulturist in America."

Mr. Dana said: "It is a great pleaure to me, as I know it is to all the rest of you, to have this opportunity of paying my respects and expressing my gratitude to Dean Hole. He is a public benefactor; not merely in the little island of England, but over the whole broad

globe, wherever the English language is heard. I trust he may remain with us as long as his duties will allow him, and I know that wherever he goes in this country he will find friends to welcome him and to assure him that he is known to them, and loved by them, although they have not before had the opportunity of seeing his face."

There were other speeches and then Mr. Craig christened John H. Taylor's new rose, a sport from Mme. Testout, a beautiful flower, with a white ground and creamy centre, giving it the name "Dean Hole."

UTAH NURSERY COMPANY ASSIGNS.

The Utah Nursery Company of Salt Lake city, on November 12th filed an assignment to Melvin B. Sowles, scheduling liabilities amounting to $115,000. No estimate was made of the assets. The laborers employed by the company are the only preferred creditors. Their wages and board and those of the attorney's fees amount to $421.10. All real and personal estate of the company is included. The real estate consists of large tracts in Salt Lake, Davis, Weber and San Pete counties, Utah; in Jefferson and Ravali counties, Montana, and in Mesa county, Colorado.

Among the unpreferred creditors are W. & T. Smith Co., Geneva, N. Y., notes and interest, $20,010.44; W. & T. Smith Co., notes and mortgage with interest, $19,200; William Smith, notes and mortgage with interest, $25,511.13; A. Keysor, note and mortgage with interest, $33,175; W. S. McCormick, note and interest, $16,391.15; J. H. Settlemeir & Son, Woodburn, Ore., note and interest, $960.76; Capital City Nursery Co., Salem, Ore., $9,000.

The company claimed to have assets far in excess of its liabilities. In addition to the realty the assets included 71,800 fruit trees, 50 tons of hay, five wagons, 23 horses, and a long list of tools, implements, supplies, etc. Under the head of bills receivable are classed notes and book accounts to the amount of $64,076.52, besides contracts to the amount of $15,000 for delivery of trees.

On the day of the assignment, William Smith, of Geneva, N. Y., brought suit against the company to recover the amount of a note, $5,000, executed on October 5, 1891. A writ of attachment against the company was obtained on the ground that the defendant had assigned its property with intent to defraud its creditors. The plaintiff alleged that 5,000 shares of the company's stock, given as security for his note had become valueless.

IN THE MIAMI VALLEY.

DAYTON, O., Nov. 22.—The advance guard of winter arrived recently with several rough stormy days, followed by delightful weather. Our nurserymen are now generally prepared for cold weather.

The fall business of the leading establishments in this valley is reported generally satisfactory, beyond what prevailing conditions seemed to warrant. Prices are advancing, and an unusual number of nurserymen's orders for spring have already been booked by our wholesale establishments.

It is a pleasure to meet a Miami Valley nurseryman now; he is really happy over the prospects. Spring trade has already opened up in a wholesale way at advancing prices, and the volume of fall business has been unexpectedly large. Both the Hoover & Gaines Co., of Dayton, Ohio, and Geo. Peters & Co., of Troy, report a fall trade quite in excess of previous years, notwithstanding the report in the November number of THE NATIONAL NURSERYMAN.

THE NATIONAL NURSERYMAN is most highly appreciated by the nurserymen of this valley, and is frequently spoken of in the highest terms. It has struck the right lead, its course is commendable, its influence elevating and its value as a medium of exchanging and disseminating information and opinions is beyond question. THE NATIONAL NURSERYMAN is already regarded as indispensable.

TADMOR, O., Nov. 22.—The tree packing has been finished for fall, and the stock remaining, "rounded up." There is a good stock of healthy apple trees on hand for spring; also a good stock of fine two-year cherry, mostly sour sorts. There is a fair stock of plums left, and the usual supply of ornamentals. In peaches the market has a decided upward tendency. Prices have advanced considerably over fall rates already, with the almost certainty of still further, strong advances. In fact, the outlook is, that peaches will be "out of sight," by March 1st, coming. There are yet several large lots in the Miami Valley, but in the hands of a few firms. The outlook for spring trade is fair. Collections for fall have been rather slower than usual, a good many notes being taken, but beyond this not much "out of the common."

The plant for next spring will be about as usual, except, probably a little lighter on apples. The Marianna plum stocks planted last spring, in the valley, were probably 200,000 to 300,000, and the buds took well. This stock seems to do better in our soil here than the Myrobolan plum stock. Weather mild, and nice for fall nursery work.

FRUIT GROWING ON GEORGIAN BAY.

For some time past, the Board of Control of the Ontario Fruit Experiment Stations has been desirous of establishing a plum station somewhere on the southern shore of the Georgian Bay, because this region is already famous for its productive plum orchards. A station of this kind, at which all the varieties of a single fruit are grown, can accomplish much for the growers of that fruit in many ways. For instance, (1) by correcting the misnamed varieties which are grown in the section, (2) by introducing little known varieties which are profitable in other sections and might possibly be remunerative in that section also, (3) by testing new varieties, (4) by conducting various experiments in spraying, in fertilizing, in pruning and in

cultivation, the results of which will, in due time, be reported for the public good. The Minister of Agriculture has placed this whole work under the joint control of the Ontario Fruit Growers' Association and the Agricultural College at Guelph.

Linus Woolverton, secretary of the Ontario Fruit Growers' Association, who has recently visited that district, reports the whole country along the southern shore of the Georgian Bay as abounding in beautiful scenery and in suitable soil for the growing of fruit, particularly the plum and apple. The Beaver Valley, especially, is most delightful. From Thornbury, near Meaford, this valley winds among the heights of the "Blue Ridge," or "Mountain," for twenty miles back to Eugenia Falls, affording some of the most picturesque scenery in Canada. The finest plums in Ontario are grown in this section, both in quality and beauty of appearance, and the yield of fruit is most remarkable in quantity.

The people of the Beaver Valley are alive to their own interests, and have vigorously enforced the black knot by-law during the last seven years, and this forethought has been worth thousands of dollars in this valley.

NO OVER-PRODUCTION OF FRUIT.

F. G. Withoft, vice-president of the Albaugh Nursery and Orchards Co., Tadmor, O., and treasurer of the Albaugh Georgia Fruit Co., who is interested in a peach orchard of 550,000 trees, believes that there is no over-production of fruit. In an article in *Farm and Home* he says: A great change has come over the fruit business of the United States within the past twenty years. Then, railroad facilities were meager both in good connections and fast time and markets were circumscribed. Within the last decade the local and shorter railroad lines have consolidated into trunk lines with lower freight rates and quicker transit and have practically revolutionized the fruit trade.

Fine fruit sells, especially as cities increase in population and wealth, and prices are not deemed of essential moment among the wealthy who want the very finest and best. With cheaper freight rates the finest fruits are now sold in the cities at reasonable rates, all expenses deducted, and still leave large profits to the grower.

In the large fruits the regions of successful orcharding are not extensive—elevation of land, a suitable climate, and a suitable soil are essentials to success. Something of love for horticultural pursuits and an adaptation to the business must be found in the grower. It is wonderful the amount of fruit that can find a market in a large city, for from the city commission houses are sent out daily large consignments to the smaller towns and villages within a radius of fifty miles and more. Thus in almost every small town or village of the North will be found berries, fruits, melons, etc., on sale, all through the season. In 1893, from one shipping point in the southern peach region were shipped on one day and in one train 10,000 bushels of fine peaches, which arrived in New York within forty-eight hours and were only as "a drop in the bucket" upon that market. Within the large cities of the Northwest, out of the fruit regions themselves, and consuming thousands of tons of fine fresh fruit annually, the markets are almost boundless.

Ten bushels of fresh fruits are consumed now in our country against one bushel twenty years ago, and the comparison will continue to increase from year to year.

Large commercial orchards are being planted in favorable localities, but even these are not keeping pace with the ever-increasing population of fruit-consuming mouths. As meats and other substantials become higher in price, more and more healthy fruit will be consumed. Look in the markets of Chicago, St. Louis, St. Paul, Minneapolis, and other cities of the northwest and see the tons and tons of insipid, half-ripened California fruit, brought over 2,000 miles to market, and then ask yourself whether fresh, delicious, well-ripened fruit from nearer home, with less than half the freight rates, will not find a paying market there for years to come. No, the fruit business is not yet overdone east of the Rockies; nor will it be for a century to come. Ever-increasing population and increasing railroad facilities will keep it on a paying basis. Ten years ago a Georgia watermelon was only seen in the few fancy green-grocers' stores of the cities; now piles of them adorn the side-walk in every rural village and over 10,000 carloads were shipped from the South last year and sold at remunerative prices.

Thousands upon thousands of bushels of peaches are put up in cans for family use in the years when they can be had. Also, when there is an extra crop of peaches in any section, under the present complete system of canning and evaporation, a crop can be handled and saved and when a year comes that no fruit is raised, this can be sold at good big prices. This is especially the case with such fine varieties as Elberta, Globe, Diamond, Dean's Red, St. Clair, Crawford, Orange and Lemon Cling. In the opinion of the writer, the fruit business is not going to be overdone while people have ability to pay reasonable prices for fruit, can get the fruit fresh and luscious and have the palate to enjoy and the stomach to receive the juicy and refreshing morsels.

The grape industry has been self-sustaining during a period of the greatest business depression known in the history of the country says the *Grape Belt*. What business has fared better or promises better for the future? The experience of the past two years has largely checked planting and has led farmers to think twice before putting out to grapes land which, in the nature of the case, could not compete with more favorable ground. Considering that good, well managed vineyards do not lose money even at the present unprecedentedly low prices for grapes, and considering that the low tide of business now passing away has given a wholesome check to planting, is there not every reason to hope for a season of steady, well founded prosperity in the grape business?

DECLARED UNCONSTITUTIONAL.

In the United States Circuit court in St. Paul, Minn., on October 13th, was heard an application for a writ of habeas corpus in the case of C. H. Schlecter, an employe of Bryant & Son, nurserymen of Princeton, Ill. Under one of the provisions of the Minnesota statutes a nurseryman selling goods in the state must file an affidavit and a bond. This law was not complied with by Bryant & Son or their agent Schlechter. He was arrested at Albert Lea, and as he would not pay the fine of $50 was sentenced to the Freeborn county jail for thirty days. The attorneys for the petitioner proposed to test the constitutionality of the law. They maintain it is not a proper exercise of the police power of the state, and that it is in contravention of the law allowing freedom of inter-state commerce. Judge Sanborn discharged the prisoner, declaring the law to be unconstitutional for the reason that it is an interference with inter-state commerce.

Commenting on this case the *Northwestern Agriculturist* says: "The law which has for nearly ten years served in a large measure to protect our tree planters from fraud, has lately been decided by a competent court to be unconstitutional. There seems to be some feeling that this law was passed to give our home nurserymen a certain monopoly of the business in the state, but those who understand the circumstances which led to the forming of the law, and know the people who were prominent in demanding it, know that such was not the intention. The nurserymen of the state, so far, have had no difficulty in disposing of all the stock they have grown, and only wish they could raise it as cheaply and as easily as their southern and eastern brethren. The nurserymen of the state ask no protection for their business, but they, and all others who are posted on the stock which is sold here from eastern and southern nurseries, know that scarcely one-tenth of it grows into anything of value to the planter, and that some reasonable and efficient restraint must be put upon these nurserymen and their agents doing business here. The outrageous work of the men who have recently sold "model orchards" among us has brought to the mind of those who have the horticultural interests of the state at heart, the need of some protection for the average planters of our state, who, with little knowledge of horticultural subjects, fall easy victims to the false representations of shrewd and unprincipled salesmen. The objection that 'farmers are certain to be swindled anyhow, and that common sense and business prudence cannot be legislated into men,' does not, in this case, hold good. As we are not, in the main, a fruit growing people, the minds of our farmers are not turned in the direction of horticultural knowledge, and this, when taken in connection with our peculiar situation and severe climate, makes it right and reasonable that our people should in a measure have the protection of law therein around their horticultural interests. That the past law has proved a failure is no proof that one cannot be framed which will stand the test, and the sooner we have it the better."

PLANTING NURSERY STOCK.

The fellow who says nursery stock should be transplanted in orchard just as it stood in nursery row has been around again this year selling stuff that he said was guaranteed to be marked north and south, so that the planters could easily replace the tree as it stood originally says *Field and Farm*. The agent has been asking fifty cents each for an ordinary fifteen cent tree just because it has this warranty. A correspondent in Montrose county desires to know if there is anything in the theory. The point made by the agent in regard to trees standing in orchard as they stood in nursery is well taken, with some exceptions, although we do not understand how he should have the gall to ask such fancy prices for this kind of stock. If trees stand quite closely in nursery and are sold for planting when two years old, there is no appreciable difference in the wood or bark of the north andsouth sides of the stems. But three and four year old trees, trimmed up to a height of three or four feet and standing quite thinly, are almost certain to sun scald if planted with the north side to the south in orchard. In such trees close examination will show the most growth of stem and the thinnest bark on the north side. The best guarantee for such trees is a sun guard. But as a rule we do not like trees that are more than two years old from the scion. We prefer to plant young stock that it may receive an early start in life and by irrigation we force the growth of the tree just as our judgment dictates. We believe trees grown by irrigation are best grown and that a tree well planted is half made. Consequently we plant young stock, force it along as best suits our ideas and trim according to circumstances and requirements. In this way we produce in time the perfect orchard.

THE SEASON AT BERLIN, MD.

BERLIN, Md., Nov, 19.—J. G. Harrison & Sons: "We started here in the nursery business ten years ago in a small way making strawberry plants and peach trees specialties. Our trade this season has been about five times that of last and at better prices. We go heavy on strawberry plants and asparagus roots in the spring. We have about five millions of each to offer. Peach trees in one year, No. 1 are about cleaned up; only June-budded are left for spring and light grades of one year trees. Apple trees, two years, are in fair supply, but slow to move. The prospects for spring are very good in plants for which we have already large orders. The growth of trees is extra, owing to a very favorable season. Our neighboring nurserymen, W. M. Peters Sons, have had a good wholesale trade on peaches. J. C. Philips of Salisbury, Md., has gone out of business. Charles Wright, A. Pullen, R. S. Johnston, Myre & Son of Delaware, are about cleaned out on No. 1 grades of peach. We are still sending out trees and plants and can ship from here on strawberry plants till May 15th."

JAMES A. THAYER.

To James A. Thayer as much as to any other man in Yates county is due the credit of putting on a substantial footing the many organizations pertaining to agriculture, with which he has been more or less prominently identified. Mr. Thayer is what may be termed a scientific farmer, and, although a young man yet, has given such close attention, and made his favorite occupation such a thorough study, as to make his opinions valued by all who have had occasion to seek them. Mr. Thayer owns and occupies one of the finest farms in the state of New York, a short distance south of Penn Yan, and under his careful management its high state of cultivation has made its productiveness proverbial. On it is one of the finest vineyards in the Lake Keuka region, and the cultivation of the vine has led Mr. Thayer into deeper researches in the matter of viticulture, until now the many articles he has contributed to the press from time to time on the subject of grape culture are quoted as authority. Mr. Thayer was born on the farm on which he now resides. At the age of sixteen he commenced teaching school, thus occupying his time during the winter and attending school in the summer. He taught in Dresden, Milo center, Crosby and other places, and also several terms at Sunbury, Pa. He became clerk of the board of supervisors and held the office during the years 1882–'83. In 1884 he was elected school commissioner of Yates county, and held the office for six years and during that period by his special fitness for the position, elevated the grade of district schools to such an extent, as to receive special commendation from the superintendent of public instruction. On his retirement from that office, he became identified with various enterprises, and on the formation of the Central New York Grape Growers' union, he was the unanimous choice of the directors for the responsible position of secretary and treasurer. He is also one of its directors, and his strong personal efforts in its behalf, have been instrumental in bringing it to the successful permanency it now enjoys. Mr. Thayer is also a director and secretary and treasurer of the Farmers' Reliance Mutual Fire Insurance company of Chemung, Schuyler and Yates counties, and his thorough knowledge of matters pertaining to agriculture, particularly qualifies him for this important position His selection was a wise one and he has been successful, during his term of office, in placing many thousands of dollars of insurance in Yates and adjoining counties. Mr. Thayer has also been secretary of the Yates County Agricultural society for a large portion of the time for the last fourteen years. He has been a lifelong Republican and is a power in local politics. Mr. Thayer is what may be termed a successful man. He comes from the best pioneer stock and is a direct descendant on his mother's side, of Roger Williams. His success in life is accredited to his thoroughness and tenacity of purpose. Honorable, upright and a man of integrity, Mr. Thayer enjoys the respect and confidence of all.



JAMES A. THAYER.

PROFESSOR Manning, of the Royal Botanical Society of England, alleges that more than one thousand varieties of pears are known to European horticulture, notwithstanding the blight.

THE peach crop of Georgia, in a good year, amounts to 6,500,000 bushels. The actual statistics in 1889, a comparatively good year, showed 5,525,119 bushels. The standard variety for markets is the Elberta, while the Alexander, Beatrice, Foster and Crawford's Early are grown for the very early market. For the local market and home use a large number of varieties are grown. The peaches in a fresh state are shipped to almost every large market in the North and East. Georgia is now the largest peach growing state in the Union.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance, - - - - - -	$1.00
Six Months, - - - - - - - -	.75
Foreign Subscriptions, in advance, - - -	1.50
Six Months, " " - - -	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., DECEMBER, 1894.

AN ENCOURAGING OUTLOOK.

The battle of deliveries, both northern, central and southern, has been so fierce during the last few weeks, that nurserymen and others connected with planting, have scarcely had time to draw breath, far less analyze the results. Northern deliveries, including the Dakotas, Montana, Washington, Idaho, are completed; they have been easier and better than was expected. In Idaho especially, there is great activity in all that pertains to fruit raising and marketing. In some instances, late shipments were caught in the freeze. Notwithstanding this fact they will average over 80 per cent. in cash. In Michigan wholesale was the central idea last season, and for the future farmers in that locality are getting to buy more and more from the catalogue. Illinois and Missouri have delivered up well, except along the southern counties, where time contracts are in the ascendency. Western Kansas as far east as Ottawa county, and along both the northern and southern tiers of counties, has been very risky territory. The deliveries there have been generally light, but even cleverness in selling has not prevented considerable shrinkage. Texas has had a good trade, but customers have been slow coming for stock, and there are still many deliveries unclosed. Oklahoma is experiencing the same trouble noted last fall, but sales having been much lighter, the loss is not so great. Arkansas, Tennessee, Georgia and Mississippi will not average more than 60 per cent. cash. This is about the usual result. Nebraska has not been a profitable field; Iowa shows up pretty well; Colorado had a big trade, chiefly on time contracts.

The outlook for spring delivery is good; stock is not getting to be over-abundant; farmers generally are hopeful and inclined to place orders. The activity manifested is probably mainly due to their having withheld orders for the past two seasons.

New sorts are coming more and more into favor, Ben Davis, Rome Beauty, Paragon, Shackleford, York Imp., being in the lead.

THE REIGN OF THE CHRYSANTHEMUM.

The chrysanthemum has reigned supreme during the last few weeks, and florists are just recovering from the depression in general trade, caused by the attention demanded by the autumn queen. In every large city and in many small ones, there have been more or less pretentious shows and the merits of the many varieties have been fully discussed. The results can be only beneficial. They prove what can be done by concentrating attention for a time upon a single object. The Chrysanthemum Society of America has reason to feel proud of its work.

Of the exhibit of the National Chrysanthemum Society of England, the *Gardener's Magazine* of London says: The grand annual festival of Queen Chrysanthemum, held at the Royal Aquarium, Westminster, on November 6, 7, and 8, was far and away a better exhibition than has been previously held anywhere under the auspices of the National Chrysanthemum Society. The cut blooms were of large size, beautifully fresh, and of marvelous depth and color; especially was this the case in the Japanese section; the whole of the classes were well contested, and the display was a grand one. Decorative arrangements were plentiful, large, and graceful, and added not a little to the general success of the show. The miscellaneous exhibits, that is, those staged by nurserymen and private growers, but not for competition, were large and numerous, and made a splendid setting to the competitive exhibits.

One of the most strongly marked characteristics of the Japanese is their love of flowers, and chief among their seven princely flowers is the chrysanthemum. A yellow 'mum is the Mikado's favorite flower. The last of the five great Japanese festivals is that of the chrysanthemum. For three weeks in November the gardens of Asakusa, Dangozaka and Sugamo are crowded by thousands of lighthearted admirers and worshipers. In these gardens, notably at Asakusa, may be seen the most wonderful compositions of flowers—warriors on horseback, scenes from traditional and national history, sometimes a whole fable is illustrated in floral tableau. The whole spring and summer have been spent in training the plants into the different shapes and forms, extra blossoms being attached to constitute natural robes and scenic effect.

ONE of the most illustrious gatherings of horticulturists ever held in this country was that which welcomed Dean S. Reynolds Hole, England's great rosarian, at a dinner in New York city last month. In the midst of the annual craze over the chrysanthemum, time was found to give

due homage to the advocate and best friend of the rose which has not yet been deprived of her high position as queen of flowers. The most prominent rose growers in America met to welcome the distinguished English visitor, and there was no doubt of the band of union between the horticulturists of the two countries. A most appropriate feature of the occasion was the christening of a new rose, the "Dean Hole." The dean said that his favorite rose was Souvenir d'un Ami, but that it, as well as the chrysanthemum and the carnation which had been named after him since he came to this country, would have to give place to the new comer.

SOME of the results of the work on Long Island under the direction of the State Experiment Station are already published in the following bulletins: No, 74, Observations on the Application of Insecticides and Fungicides; No. 75, I. Insects injurious to Squash, Melon and Cucumber Vines; II. The Asparagus Beetle. These bulletins are for free distribution and we urge those of our readers who are not now receiving the bulletins of this station, to send their address to the director, Dr. Peter Collier, Geneva, N. Y., asking to have their names placed on the bulletin list.

THE season for the annual meetings of the horticultural societies throughout the country is at hand. Many nurserymen are members of horticultural societies. Those who are not will find it greatly to their advantage to ally themselves with the district and state organizations nearest them. The topics discussed are of special interest to nurserymen, and opportunity is there afforded of learning what the planters want, and of correcting false impressions regarding varieties.

CY WARMAN'S tall stories of Colorado apple growing—the harvesting of 1,500 barrels of apples from an orchard of five acres, and selling at $5,800, or $1,160 per acre—lead the *California Fruit Grower* to remark that it would be difficult for the most eminent California boomer to get beyond that and to suggest that Mr. Warman would succeed as a novelist.

PROFESSOR M. V. Slingerland, of the Cornell Experiment Station, says that the whole plum industry of Western New York, especially the great orchards in the vicinity of Lockport, Rochester and Geneva is threatened with destruction by a new insect pest. He advises spraying with kerosene emulsion.

DEALERS who label blackberry bushes for fine roses, and cottonwoods for Kieffer pears, should be exposed. They are of inestimable damage to the business generally. Fortunately the public is being educated to look out for this sort of thing, and consequently there is less of it than formerly.

THE attention of the originator might well be directed toward the improvement of the blackberry and the raspberry, in the line of reducing the size of the seeds. It may be that good results can be obtained by the propagation of natural seedlings.

THE Buffalo *Express* says that a florist of that city produces green carnations by dyeing the natural flower, and that he is meeting a demand for tints in flowers to match dresses, by the same means. All deception is not confined to the tree man.

FALL WORK AT NORTH TOPEKA.

NORTH TOPEKA, Kan., Nov. 19.—The growing of apple seedlings in this locality has been increasing for several years. The past season about 300 acres were planted near this city. The soil here is well adapted to growing these stocks. The digging was finished about the 10th of the month, and the sorting and grading is progressing rapidly. Shipments usually commence about the 20th. Prices on apple seedlings have been lower this fall than we have ever known. Growers seemed to think there would not be a market for all the stocks, consequently many sales have been made at various prices. And now growers are beginning to find out that the supply in the country is not as large as they thought it would be. There seems to be a fair prospect of the demand being as great, if not greater than the supply. We look for better prices during the remainder of the season.

LARGEST SHIPPING POINT FOR GRAPES.

Regarding the results of co-operation as illustrated by the work of the Northern Ohio Grape company, of Euclid, near Cleveland, O., the Cleveland *News* says: "Over 1,000 growers in this belt are members of the association. This company is what is called a union, and is only one of many that have come into existence since the growers arrived at the conclusion that by banding together they could get better prices for their product and handle it at less cost than they could individually. Grape growing is the most profitable crop that Ohio farmers can raise at the present time, as it has been for years. It may surprise Cleveland people to learn that Euclid is the largest single shipping point for grapes in the United States, but such is the fact.

The Northern Ohio Grape company handled 850 carloads of the fruit this season, which was about 200 carloads less than was handled in this vicinity last year. These 850 carloads represented about 85 per cent. of the entire crop in this belt. Owing to the general depression at all business points and to great competition from California, prices have been low. It is thought, however, that the results of the union will be satisfactory to the growers included in it. The prices for all varieties of grapes averaged about 13 cents per 9-lb. basket. The company's sales have aggregated something like $310,000, and over 90 per cent of this amount has been paid in. The officers of the company do not think there is a dollar on the books that cannot be collected.

WHAT TRIBUNAL SHALL DECIDE?

Some of the California papers are criticising eastern nurserymen who complain against these restrictions upon trade, and some eastern nurserymen, on the other hand, hold that the laws operate not so much to exclude the enemies of plants as to give a monopoly of business to local nurserymen. It is well for the fruit-growers to be vigilant if by this they can keep away from their state the peach-yellows and the plum-curculio, but when they criticise eastern nurserymen as unscrupulous and selfish they ought to remember that the pernicious or San José scale has been sent from California into the orchards of the eastern United States. The protection of the fruit interests of the whole country may, therefore, demand an inspection of the thousands of car-loads of fruit going out of California, as well as of the few plants and fruits carried into that state.

The fact is that the establishment of an efficient quarantine on the borders of every state in the Union would be a task beset with endless embarrassment. A year ago we explained some of the difficulties which the Federal Government would encounter if, under its authority to regulate commerce among the several states, any attempt should be made to prevent the transportation of pestiferous insects and contagious plant diseases from one part of the country to another. We pointed out, too, some of the difficulties which a state government must face in its efforts to suppress destructive insects, plant diseases and noxious weeds within its borders. It would not be an easy matter to exclude these pests from foreign countries since the germs of disease, the seeds of evil-weeds, the eggs of insects and insects themselves can be imported in a hundred ways, even if all the fruit and seeds and bulbs and living plants brought into the country were rigidly inspected. These difficulties would be multiplied many fold if the supervision of all the commerce between the various states is undertaken.

A single state may prohibit the importation of fruit or nursery-stock, for example, if it comes from a disease-infected district, just as it has the power to exclude cattle sent from a place where the Texas fever or pleuro-pneumonia prevails. In every case where such transportation is arrested, decision must be made as to whether the material is justly held or not, and what tribunal is to decide all these cases? If all the states set up a quarantine, such action might compel an examination not only of all the nursery-stock and fruits which cross state lines, but of every article which is liable to harbor a dangerous insect or a fungus spore, so that the cost of all this examination would ultimately be more serious than the ravages of the pests themselves. Legislation in individual states for the suppression of some of these enemies may be locally beneficial, but even then such laws will only have value when there is a strong public sentiment behind them, not to speak of such a public spirit in individuals as would enable them to take broad and patriotic views of the destruction of their own property when it threatens that of others. We by no means assert that quarantine laws which have been so far enacted are to be condemned, but it is pretty plain that not only the spirit of individual independence, but the sentiment of retaliation of one community against another could be easily aroused if it should appear that the rights of one section were infringed by the restrictions on commerce made by another. Altogether, the subject is one worthy of careful study by every thoughtful citizen. —*Garden and Forest.*

A WARNING TO NURSERYMEN.

In a communication to *Garden and Forest*, F. A. Sirrine who with V. H. Lowe is studying insect pests on Long Island, under the direction of the New York Experiment Station, says: "The San José scale was observed first in the market at Jamaica, on some Bartlett pears said to have been grown on the island. The scale was also conspicuous on some fancy varieties of pears exhibited at the Queens County Fair, and by tracing this fruit to its source some of the infected nurseries were located. We have found the scale on pear, apple, peach and quince stock in several nurseries. Some of the nurserymen think they have had this same scale on their young trees for the past twenty years, but the indications are that it has been introduced within the past two or three years. Some of the large nurseries of the state are undoubtedly centres of infection.

"Nurserymen here evidently do not realize that this is a serious pest. They are used to seeing on their stock the native scale insects, which cause no marked injury. They apparently do not realize that large sums of money have been expended in efforts to exterminate this pest in California, and that it will be a more dangerous enemy here than the Colorado potato-beetle unless prompt efforts are made to suppress it. True, we probably have a better chance to fight the pest here during the winter than nurserymen have in California, but it will require an organized and very strenuous effort to overcome it.

"This scale is now found in Virginia, Maryland, New Jersey and New York; in fact, in the very center of the nurseries of the Atlantic coast. Nurserymen should make it a rule among themselves to put all stock through a vat of kerosene emulsion.

"Every fruit-grower or nurseryman who discovers scale insects of any kind on his trees should send samples without delay to the nearest trustworthy entomologist.'

NURSERYMEN HAVE PROVED IT.

The New York *Sun* says: "The most successful advertisers are those who keep their business constantly before the public, without regard to the state of trade. They will not allow themselves and their business to be forgotten."

THE NATIONAL NURSERYMAN can vouch for the truth of that statement, for a perusal of letters from advertisers in this journal who keep their advertisements standing, is but an echo of what the *Sun* has said. "Keep our advertisement standing" is the order, which proves plainly enough the value received.

Among Growers and Dealers.

W. S. Van Zandt has started in the nursery business at Dixon, Cal.

The Evergreen Nursery Company has been incorporated at Milwaukee, Wis., with a capital stock of $75,000.

Patrick H. Morris, of Englewood, N. J., died on November 14th. The business will be continued by Henry Morris.

George Pinney, one of the most extensive nurserymen in Wisconsin, died on November 2d at his home in Evergreen, aged 62 years.

C. F. McNair, of Dansville, N. Y., says that the planting there for next season will be about one-half of that of last season. Some of the small growers have gone out of the business.

Frederick W. Kelsey, of Orange, N. J., recently gave a dinner to the Essex County Park Commission, at which the subject of county parks was discussed. Speeches encouraging the construction of parks and parkways were made.

P. H. Morris, senior member of the firm of P. H. & S. E. Morris, Spring Lake Nursery, Englewood, N. J., died on November 14th, aged 49 years. He had been in the nursery business six years. The business will be continued by Harry Morris.

The Grand Valley Nursery Company has this season gathered 100 bushels of peach pits which will be planted at once, the idea being to secure therefrom 500,000 seedling stocks on which to propagate the popular varieties grown in that section.

The greenhouses and packing sheds of the Rogers Nursery Co. were destroyed by fire on November 25th. The loss was $10,000. There was insurance to the amount of $1,600 on the greenhouses and $6,500 on nursery stock. The fire was caused by the explosion of a lantern.

J. Frank Norris, Brighton, N. Y., made a general assignment on November 15. The only preferred creditor was the Alliance Bank of Rochester, for a note of $400. J. D. C. Rumsey, the assignee, filed a schedule showing liabilities, $10,077.25; nominal assets $45,602.62; actual assets, $19,801.41.

George Pinney, proprietor of the Evergreen Nurseries at Evergreen, Wis., died on November 2d. The Evergreen Nursery Co. has been incorporated with a capital stock of $100,000. The acting president is J. L. Buchan, who is also the general manager. F. C. Pinney, is secretary and treasurer.

The Kelsey Nursery Company filed articles of incorporation in the office of the county recorder in St. Joseph, Mo., November 3d. The capital stock is $5,000. The stockholders are H. T. Kelsey, Ida F. Kelsey, Dora M. Hamilton and Edward E. Wakeley. All mail matter sent to the "Vineland Nurseries," "Vineland Nursery Co.," "Kelsey & Co.," "Kelsey Bros." "H. T. Kelsey & Co.," "Kelsey & Son," is received by The Kelsey Nursery Co. successors to Kelsey & Co.

SECRETARY MORTON'S REPORT.

The secretary of agriculture has prepared his annual report for 1894. Regarding the division of pomology he says:

During the year Mr. S. B. Heiges, of Pennsylvania, a horticulturist of long experience and of practical skill, was made chief of the division, and it is to-day in better working order than ever before since its creation By order of the president it has been placed wholly in the classified civil service, from the chief and assistant chief down to the messengers.

The division is principally engaged in correspondence with fruit-growers; in critical examination and comparison of specimen fruits received from them for identification, description, and illustration of such specimens as may seem worthy of record and propagation. All new and improved varieties of this sort are modeled and colored.

During the year close attention has been given to the investigation of the varieties of the apple. Notwithstanding the almost total failure of the crop, some two hundred specimens of new or little-known varieties of apples —some of which promise to be very valuable—have been received. Besides these many old varieties which had been catalogued and planted as new have been identified as to their origin and character.

The damaging frosts of the last week in March were made the subject of investigation during the month of April, and the results were published in a special circular with the report of the statistician for May. Important facts were developed in the course of this inquest which will be of great value to peach-growers. Noticeable among them is the fact that certain groups or families of the Persian race of peaches bloom later than others in the South, and they are therefore less likely to have their fruit cut off by frosts. This discovery is of great value, and estimated to be worth, in dollars and cents, many times the expense of the investigation. Numerous scions and plants of promising varieties have been experimentally planted during the year. Among the principal importations by the division of pomology are collections of fig cuttings from England and citron cuttings from Corsica.

THE APPLE CROP.

Messrs. Mayer and Day, two of the largest exporters of apples in New York city, say that the apple crop this season is light. Mr. Mayer says in a report to England: "The export season begins about the middle of August, and shipments are light during the first two weeks, but steadily increase in volume. It continues till about April 1st, but the bulk of the business is done before December 15th. Shipments vary so much in quantity that it would be difficult to strike a correct average. During the week ending September 30th, 1892, there were 65,888 barrels of apples exported, while in the corresponding week of the next year there were only five barrels shipped abroad; and yet I have seen, in round numbers, 100,000 barrels

exported in a single week. All kinds of apples, except soft kinds that will not keep well, are exported. The English people, you know, are partial to red, as a color, and, as a rule, they prefer red apples, such as Baldwins, Kings, &c. Newtown Pippins were formerly favorite apples with the English, but after some unscrupulous shippers had foisted upon them a lot of inferior apples, falsely branded 'Newtown Pippins,' they did not care for them any more. Our crop here will not be more than half of an average full crop, being short in most sections and abundant in but few. In July the outlook was good, but the prolonged hot and dry weather has materially changed the situation. Farmers have an advantage in the fact that, on account of fast ships and the cables, they can get their money in two weeks from the day of shipment, while formerly they had to wait 25 to 30 days."

Mr. Day says: "The American crop will not be more than one-third of a fair average crop. Along the Hudson River there is promise of a good yield, but in the western part of the state there will not be this season more than one-eighth of an ordinary crop. In that section almost all of the apples have fallen to the ground before maturity, The cause of the fruit dropping from the trees was the prolonged and excessive heat and drought. Some of the western states have small crops, and others only fair ones. The Canadian crop is pretty good. The freight from here to Liverpool is about seventy-five cents a barrel. The continental apple crop as a whole, is a complete failure, and the apples small and poor. Europe will have to depend upon the United States and Canada for her supply. The apple market is strong, and higher prices will rule."

FRUIT PROSPECTS IN MISSOURI.

I find the greatest draw-back to the fruit industry in Missouri, is the lack of energy in planting and care of fruit. It is true, here as elsewhere, we have many insects and diseases peculiar to fruit to contend with. When the proper remedy and due care is applied we have a successful fruit crop. Take the five points that go to make a perfect apple, viz: size, condition, color, quality and flavor we find as near perfect here as any place in the United States. Plum, pear, cherry, and about one season out of three we have from good to fair crops of peaches, while the three former are regular fruiters. All small fruits can be profitably grown here. Taking this state over I boldly say, Missouri can grow as fine and as much fruit as any state in the United States. The tree business is greatly abused here by dealers cutting on prices, also by making orders to get the advanced per cent. from nurserymen. I can encourage people to come to Missouri if they intend going into the fruit business, as land can be had here from $10 to $30 per acre with fair improvements and handy to market. I will answer all inquiry, with stamp for return postage. I am not in the real estate business.

Marceline, Mo. S. H. LINTON.

FROM VARIOUS POINTS.

William Mathews of Utica, N. Y., gives figures showing that the cost of plants, potting and maintaining 200 Cattleya labiata bought in 1892, was $420, and the receipts were $660. He knows of nothing that a florist can hang in the roof of a house which will bring so much profit as orchids.

It has been established that in the case of the apple crop, spraying will protect from 50 to 92 per cent. of the fruit, which would otherwise be wormy, and that in actual marketing experience the price has been enhanced from $1 to $2.50 per barrel, and this is at a cost of about 10 cents per tree for labor and material.

The Stark nurseries at Louisiana, Missouri, are said to have been established seventy years ago by Judge James Stark, who emigrated from Lexington, Kentucky, to Missouri in 1816. The Judge planted the first grafted orchard in the latter named state, having carried the scions used for that purpose from Kentucky on horseback.

In the case of large pear trees attacked by leaf blight, and almost killed by it, I have seen them completely restored in two or three years by spraying two or three times in early spring and summer with the Bordeaux mixture. It will certainly pay farmers and fruit growers to become thoroughly familiar with this subject before spring comes.—Joseph Meehan.

The Grand Rapids Fruit-Growers' Association, which was organized in the interests of shippers, held its final meeting for the season some days ago. After paying all bills the association had a small cash balance in the treasury. During the year the association doubled its membership, comprising now 160 members. It has done an excellent work for its members, saving from $2,500 to $3,000 in the matter of freight alone, by the reduction secured in the rates on peaches.

J. B. Heiss in a communication to *The Florists' Exchange*, adds encouragement to the project for the establishment of a national rose society. He advocates putting the annual dues at $3 per year and the issuing of a monthly journal devoted exclusively to roses, a copy to be sent free to each member. Mr. Heiss suggests the establishment of a jury to give awards of merit for all roses old and new, the discussion of diseases peculiar to roses, fertilizers, and the testing of new varieties.

J. M. Rice, says: I am not an enthusiast in anything, so while others are extolling Oklahoma as the coming fruit garden of the world, I will simply say that three seasons of observation and work suggests to me that much care will be needed here as elsewhere. I lived in Iowa thirty years and it used to be said, "This is no fruit country," yet to-day it numbers some of the large orchards of the world. But it took many years to learn what was adapted in variety and method of culture. A generation of eastern trees had to die out, new varieties be secured and new methods of planting and culture adopted.

WESTERN TREES IN EASTERN ORCHARDS.

Alexander & Hammon, Briggs, Butte Co. Cal,, write the *California Fruit Grower* as follows:

"As an item of interest as well as news, we quote from an order for several thousand plum, peach and prune trees just received from H. H. Napier, an extensive fruit grower of Lucas county, Northern Ohio:

'I am growing many varieties of fruit trees brought from your state, and find all much more vigorous than eastern grown stock. I have prune and peach trees from California which have stood two very severe winters right out on the lake front, and they are in fine shape for the coming winter. Therefore, I am led to place further orders for California grown stock.'

"Doubtless this will not only interest California fruit growers and nurserymen, but eastern fruit growers and nurserymen as well. It is a fact of which eastern growers have too long been ignorant, that Calfornia nursery grown trees will do at least as well, in many sections east of the Rocky Mountains, if not better in every respect than stunted eastern grown trees, where cold weather checks the flow of sap before the tree is fully matured, and two years' growth is necessary before even attaining merchantable size. This may seem a paradox to some, but to experienced planters like Mr. Napier, in needs no demonstration."

MONROE MATTERS.

MONROE, Mich., Nov. 24.—The *Commercial* of October 19th had a "write-up" of the leading industries of Monroe, and of course our nurserymen got a big "send off." Well, they deserve it. It appears by the account that they not only enjoy themselves, but they make life enjoyable for hundreds of people, who find employment at the business as workmen or salesmen.

Mr. Murphy, who is connected with the nursery interests at St. Thomas, Ontario, was a caller at Monroe on Nov. 23d.

The fall trade just closed had only one special characteristic, viz: low prices. In quantity and kind of stock handled, it was substantially the same as usual.

Greening Bros. have added 80 acres to their nursery farms. This brings them to the 500 acre point. Twelve years ago they began business with 40 acres.

ARZENA.

RECENT PUBLICATIONS.

A recent number of *American Gardening*, New York City, contains beautiful half tone illustrations of some of the best new chrysanthemums, together with other entertaining matter relating to the conservatory and garden.

The Rural New Yorker is a model upon which all farm publications may with profit be based. It is bright, clean, handsome and, beyond all, progressive. It is to the agricultural interests of the country what THE NATIONAL NURSERYMAN aims to be to the nursery interests.

The first part of the transactions of the Massachusetts Horticultural Society for 1894 has been published. It contains 204 pages of valuable discussions of fungi, pruning, hardy grapes, electricity and plant growing, the construction of plant houses, mushrooms, cinerarias and calceolarias, injurious insects, the metropolitan park system, growing seeds for market and other subjects.

That well-known horticulturist, Andrew Fuller, thirty years ago published the first edition of "The Grape Culturist," the demand for which necessitated subsequent editions until the original plates were worn out Now the book has been issued in new revised form. This book on grape culture has by common consent been given the palm for practical value and usefulness. The new edition has been found necessary because of the rapid strides which have been made in viticulture in the past few years. The present edition, materially enlarged, is decidedly up to date. All the discoveries pertaining to materials and methods of applying them for the purpose of resisting the various fungus diseases which have been so disastrous to grape culture, receive attention in this new edition. The list of standard grapes is carefully revised and a large list of the more recent, but as yet unestablished varieties, is given for consideration. It is a complete vade mecum for anyone contemplating grape growing, and no vineyardist, no matter how long his experience, can afford to be without it. Chapters on growing from seed, on the various methods of wood propagation, layering, grafting, character of soil, which are best for vineyards, trellising, pruning, culture, etc, are complete and interesting. The book has 282 pages; handsomely illustrated, 12 mo. Price, postpaid, $1.50. New York: Orange Judd Co.

OBTAINED WHAT HE WANTED.

CHARLES S. LINDLEY, BELFIELD, VA.—"As I have accomplished my desire please discontinue my advertisement. But let me give praise where praise belongs. It is through your valuable medium, THE NATIONAL NURSERYMAN, that I have obtained what I wanted. Success to your valuable journal. When I want to sell anything again, or want anything in the nursery line, I will know how to go about it, and that will be to advertise in your journal."

A NURSERYMAN'S GRATITUDE.

HARRY L. BOYD, CHESTERTOWN, MD.—"THE NATIONAL NURSERYMAN has paid me many fold. If I had not subscribed for the journal, I would not have known where half the firms therein represented were located. Through the columns of the journal I purchased from Irving Rouse stock to the amount of $1,600, and from Allen L. Wood small fruits to the amount of $600. I would not be without THE NATIONAL NURSERYMAN if it cost $5 per year."

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, C. S. CURTICE CO., Portland, N. Y.

SEEDS

FRENCH CRAB AND PEAR SEED, 1st Quality Crop, 1894.

We can offer the above in quantity at lowest rates. Prices on application.

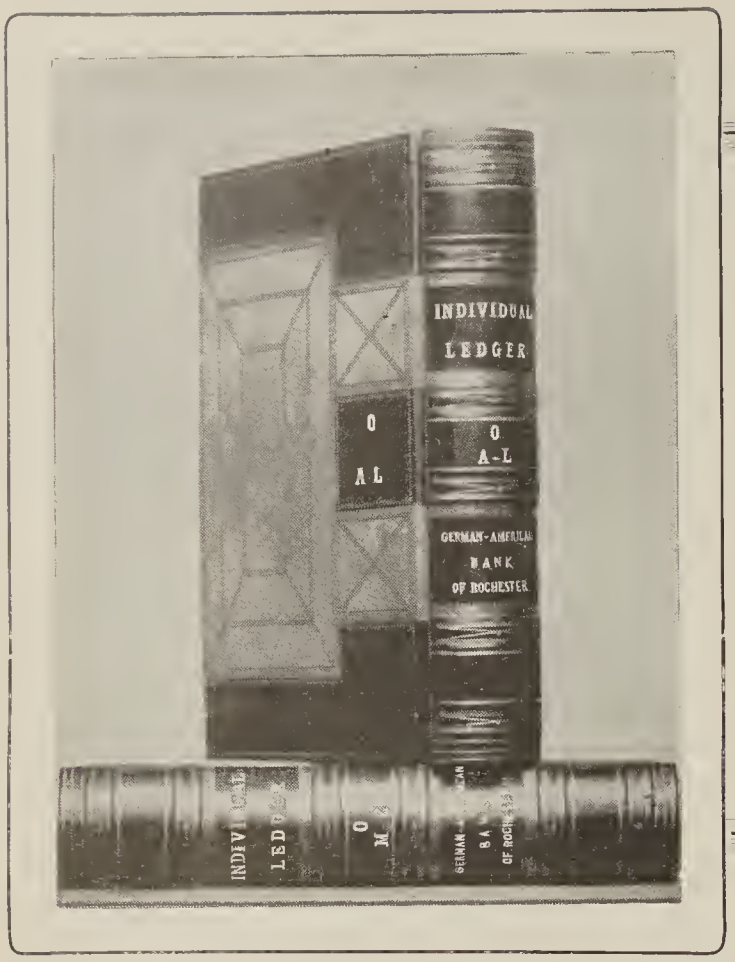
BERKHAN & OTGEN, - 39-41 Cortland Street, NEW YORK.

NURSERYMAN WANTED,

Who understands Grafting and Budding, and Propagating of Small Fruits. Will hire by the year or sell a half interest in a paying business to a man with some capital and considerable energy.

Address, Box 685, ST. THOMAS, ONT.

1873 = 1894



This is the
Month for New

BLANK BOOKS



WE MAKE 'EM FOR EVERYBODY

BUT YOU,

WOULD LIKE YOU TO TRY US.



BUT OUR MAIN BUSINESS IS **PRINTING**

We are like an octopus—reaching in every direction (for trade). We are printing the "National Nurseryman" and we are now grasping for you(R trade). Don't be afraid, we will not hurt you, but put tone into your printed matter (if you will let us.) We are not a mush-room concern, we have attained our majority, and know how to please our customers. We give the free use of all of our cuts (over 5000). No job too small and none too large for our facilities.

CORRESPONDENCE SOLICITED.

THE JOHN P. SMITH PRINTING HOUSE,

72-74 Exchange Street, ROCHESTER, N. Y.

FRENCH FRUIT TREE STOCKS.

Immense Stock. **Large Assortment.**

LENAULT HUET, Nurseryman at Ussy, Calvados, France, offers Fruit and Forest Trees, Evergreens, Shrubs, Roses and a general list of Nursery Stocks of the finest quality and high grade, with branches at Angers and Orleans. I am enabled to supply any wants of the trade at the most moderate prices. Before purchasing elsewhere send me an estimate of your wants and learn my prices.

Special care given to grading and packing. Satisfaction guaranteed.

Address all orders and enquiries to . . .

C. H. JOOSTEN,

3 Coenties Slip, NEW YORK.

WANTED at the proper season, prices and catalogues of Conifer Seeds.

Guaranteed to be free from Aphis or Disease.

WELL GRADED.

Send For Samples and Prices.

LARGE STOCK.

APPLE SEEDLINGS

ALSO

Osage, Mulberry, Honey Locust and

SHADE TREES

OF ALL SORTS.

Address, YOUNGERS & CO., Geneva, Neb.

SNOWHILL NURSERIES

Now Offer for Fall Delivery, 1894,

PEACH TREES, Fine Growth and Strictly Healthy, one year old from buds, and June Buds, all the most popular varieties, including **CROSBY** and **CHAMPION.**

Also, 20,000 1-YEAR OLD APPLE.
2,000 NORWAY MAPLES, 8 to 9 feet.
5,000 CAROLINA POPLARS, 9 to 12 feet.
20,000 1-YEAR OLD GRAPE VINES.
500,000 ASPARAGUS ROOTS, 1 and 2 years old.
TWO MILLION STRAWBERRY PLANTS.

PRICE LIST NOW READY. CORRESPONDENCE SOLICITED.

Address,

W. M. PETERS' SONS,

WESLEY P. O., WORCESTER CO., MARYLAND.

STARK BRO'S

Nurseries and Orchards Co.,

LOUISIANA, MO. ⊡ **ROCKPORT, ILL.**

All FRESH land and the very finest nursery soil A very large general stock. Fruit trees by the million.

Staples, also many new leaders and favorites, including:

APPLE—Akin, Ark, Black, Babbit, Sefferis, Kinnaird Choice, Nero, Paragon (Mam. Black Twig, Arkansas), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR—Bessimianka, Garber, Idaho, Koonce, Krull, Japan Golden Russet, Margaret, Pres't Drouard, etc.

CHERRY—Abbesse (Sweet Duke, best grower and hardiest Duke); Bl'k Tartarian Improved, Cal. Advance, Ida, Montmorency Ord Ostheimer, Suda Hardy, Windsor, etc.

PLUM—Abundance, Burbank, Clyman, Freestone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Mo. Apricot, Orient, Pool Pride, Tragedy and Golden prunes, World Beater, etc.

PEACH—Gold Dust, Northern Ap't, Sneed, Champion, etc.

APRICOTS—Sunrise, Noonday—new **large** Russians.

CRAB—Florence, Gibb, Richland Sweet, Looker, Winter, etc.

GRAPES, GOOSEBERRIES, CURRANTS, BLACKBERRY, RASPBERRY, ORNAMENTAL TREES, EVERGREENS, ROSES, SHRUBS.

NIAGARA NURSERIES ESTABLISHED 1839

PEAR TREES

AND ALL OTHER NURSERY PRODUCTS.

E. MOODY & SONS LOCKPORT, N.Y.

APPLE SEEDLINGS

1,000 to Car-Load Lots.

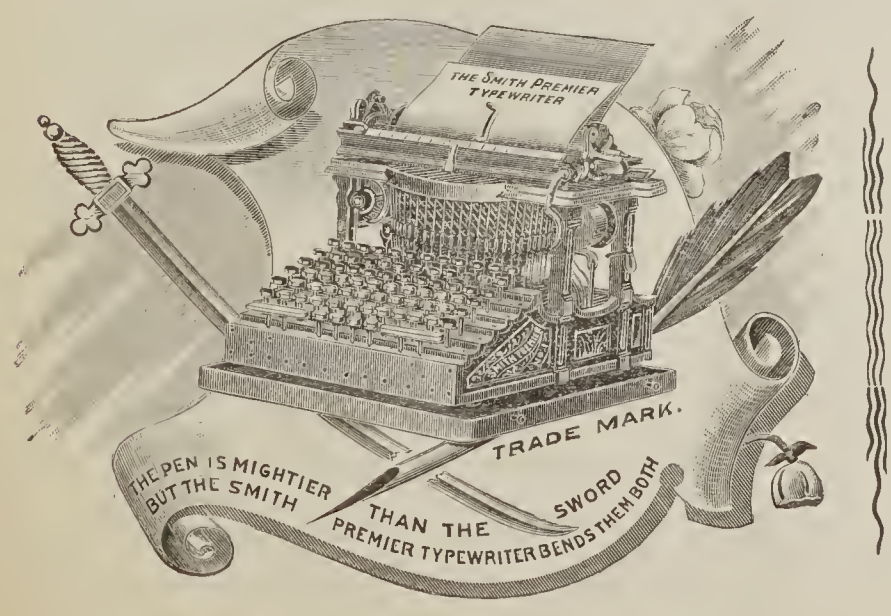
APPLE, PEAR, PLUM AND CHERRY TREES,

Evergreens and Small Fruits, Pear Seedlings.

WHOLESALE PRICE LIST IN AUGUST.

Special Quotations Now. W. A. WATSON & CO.,

Normal, Ill.



The Smith Premier

Wins on its merits. The favorite everywhere.
Surpasses all older machines.
Properly used always in order.
Outlasts all others and retains alignment.
Automatically cleaned without extra attachments.
Almost noiseless, corrections easy, mistakes prevented.
Used exclusively by Associated Press, of New York, to take dispatches direct from the wire.
Rapidly being adopted by the Government.
Offices in leading cities.

THE SMITH PREMIER TYPEWRITER CO., Syracuse, N. Y., U. S. A.

ROCHESTER, N. Y., OFFICE.

407-410 POWERS BLOCK.

WE are in the lead with Quality and Prices.

Apple Trees,

Apple Seedlings,

Apple Root Grafts.

Let us Price your Wants.

F. W. WATSON & CO.,

TOPEKA, KANS.

Peach Trees.

These have been a leading feature of our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varie ies known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BRO. & THOMAS,

Maple Avenue Nurseries, WEST CHESTER, PA.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First-Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine),
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, = = = CHESTER CO., PA.

When writing to advertisers mention The National Nurseryman.

Woodlawn Nurseries,

ROCHESTER, N. Y.

ALLEN L. WOOD.

WHOLESALE ONLY.

GROWER OF SMALL FRUIT PLANTS FOR NURSERYMEN AND DEALERS.

We have the following Plants in our cellar for Early Spring Shipment, in large quantities:

RASPBERRIES—Brandywine, Cuthbert, Caroline, Brinckle Orange, Golden Queen, Herstine, Marlboro, Thompson Early, Doolittle, Gregg, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's, Colossal and Tyler.

BLACKBERRIES—Agawam, Early Harvest, Kittatinny, Taylor, Snyder, Wachusett and Wilson Early.

CURRANTS, 2 yrs., Fay's.

CURRANTS, 1 year (strong), Black Naples, Cherry, Fay, Versailles, North Star and White Grape.

STRAWBERRIES—Greenville, and other assorted kinds.

ASPARAGUS, 2 years, Conover's Palmetto and Elmira.

RHUBARB, 2 years, Myatt and Victoria.

Also, an assortment of GRAPES.

☞ **Wholesale Catalogue for Spring, ready March 1st—FREE.**

GILBERT COSTICH,

ROCHESTER, N. Y.

For Fall, '94, and Spring, '95.

STD. AND DWF. PEAR, APPLE, PLUM. CHERRY, APRICOTS, SHRUBS, EVERGREENS AND ORNAMENTAL TREES.

Lowest Prices Given on Application. *GILBERT COSTICH, Rochester, N. Y.*

R. H. BLAIR & CO.,

Office Northwest cor. 11th & Walnut Sts.,

KANSAS CITY, MO.

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail.

STRICTLY No. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM. ROSES, ORNAMENTAL AND SHADE TREES.

Prices Low. No bet'er shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

W. T. Hood & Co.,

OLD DOMINION NURSERIES,

350 Acres under Cultivation. **Richmond, Va.**

FOR FALL 1894-SPRING 1895.

A Very Large Stock of Apple, Peach, Cherry, Etc., Etc., Ornamental Trees and Shrubs.

Cellar, Packing Sheds and Best Facilities for Handling Stock Promptly.

When writing to advertisers mention The National Nurseryman.

Syracuse Nurseries
and "Lakeside" Stock Farm.

An unusually fine lot of young, thrifty

BUDDED APPLES,
STAND. & DWARF PEARS.
PLUMS.

A very fine line of

ORNAMENTAL TREES AND SHRUBS,

Suitable for LAWNS and PARKS, and a very large exceptionally choice list of

ROSES,

All of which will be offered at low prices to suit the times.

Also a lot of very fine extra size APPLES and PEARS at extremely low rates, in order to clear blocks.

We offer unusual inducements to parties wishing to purchase Nursery Stock in quantity, and guarantee to furnish strictly choice, well-graded, young, and thrifty stock and that which is true to name.

OUR

LIVE STOCK DEPARTMENT

Is replete with HORSES and CATTLE of all ages and both sexes, of the following breeds:

Standard Bred,
French and American Coach,
Leveland Bay,
Hackney,
Clydesdale,
Percheron,
and Driving, Coach, or Carriage Horses, single or in pairs.

—ALSO—

HOLSTEIN FRIESIAN CATTLE

Of the most noted milk and butter producing strains.

Correspondence solicited and the same will be promptly attended to.

SMITHS & POWELL CO., Syracuse, N. Y.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

· · BRIGHTON, N. Y. · ·

I have to offer for Fall 1894, and Spring 1895, the following strictly first-class stock:

75,000 APPLE TREES,	25,000 STANDARD PEARS,
10,000 DWARF PEARS,	15,000 PLUM TREES,
15,000 CHERRY TREES,	10,000 PEACH TREES.

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

JOHN PALMER & SON, Ltd.,

ANNAN NURSERIES, - - DUMFRIESSHIRE, SCOTLAND,

Have for FALL and SPRING SHIPMENT an IMMENSE STOCK of

INDUSTRY GOOSEBERRIES, one, two and three years, carefully selected and well graded.

WHITESMITH, CROWN BOB, and LANCASHIRE LAD GOOSE BERRIES, No. 1 stock.

H. P. AND MOSS ROSES, best sorts, strong and good.

TREE ROSES, good bushy heads, good roots.

NEW POLYANTHA ROSE, "Crimson Rambler," the finest of its class in the world.

NEW HYBRID SWEET BRIERS, a sterling novelty.

CLEMATIS JACKMANNII, and other most popular varieties, two-years, strong plants.

RHODODENDRON, hybrid grafted, best and hardiest sorts from one to three feet.

RHODODENDRON PONTICUM, well set with flower buds, all sizes, very cheap.

MANETTII AND MULTIFLORA ROSE STOCKS, well rooted.

NORWAY MAPLES, 18 to 24 in., two to three and three to four feet. Straight trees, carefully transplanted.

CUT-LEAVED WEEPING BIRCH, two to three, three to four, and four to five feet.

MOUNTAIN ASH, SCOTCH LARCH, BIRCH AND ELMS, BEECH, LINDEN, CALIFORNIA PRIVET, NORWAY SPRUCE, AUSTRIAN AND SCOTCH PINE, HYDRANGEA PANICULATA GRANDIFLORA, and a general line of stock of the best sizes for export.

Lowest Through Rates to all points in the United States and Canada.

Catalogues Free.

Write for prices before ordering elsewhere. Correspondence and early orders solicited.

W. C. SLOCOCK,

WOKING, ENGLAND.

A LARGE STOCK GROWN SPECIALLY FOR THE TRADE.

CLEMATIS.—30,000 strong plants. Plenty of Jackmanii, Henryii and other leading sorts.

ROSES.—Standards and Dwarfs. All leading kinds in quantity.

RHODODENDRONS and other American plants.
FRUIT TREES and FRUIT TREE STOCKS. A large quantity.

HARDY, ORNAMENTAL EVERGREEN, DECIDUOUS TREES, SHRUBS and CONIFERS. A good collection.

FOREST TREES and FOREST SEEDLINGS.

. . . PRICED LIST ON APPLICATION. . . .

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots). Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces Nectarines.

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb.

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beech, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows.

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers.

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc.

TREE ROSES . . Hybrid Roses, Tea Roses, Climbing Roses, Moss Roses, Azalias, Rhododendrons, Clematis, Industry Gooseberry. . . . . .

Send List of your wants for prices. W. & T. SMITH CO.

GRAPE VINES

NIAGARA All old and new varieties. Extra quality. **Warranted** true. *Lowest Rates.* Introducers of the

EATON.

Also other SMALL FRUITS. Descriptive Catalogue Free.

T. S. HUBBARD CO., Fredonia, N. Y.

ESTABLISHED 1852.

Phoenix Nursery Co.,

600 Acres. . . .
13 Greenhouses. .

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS ✥ **Wholesale and Retail.**

Correspondence solicited and promptly answered.
Send list of wants for prices. Salesmen wanted.

P. O BOX 1215. BLOOMINGTON, ILL.

The SPARTA NURSERIES

Always have in stock their Dry Baled Moss. Same quality in bulk. . . . .

The Finest Grade of Strawberry, Raspberry and Blackberry Plants Ever Offered. Write for Prices.

Sparta, Wis., Aug 1, 1894. Z. K JEWETT & CO.

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices. *TOMAH, WIS.*

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries.

ESTABLISHED 1780.

BRAULT & SON, Directors,

ANGERS, FRANCE.

SPECIALTY OF NURSERY STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS, MAGNOLIAS, LILAC, ETC. . . . . .

AGENT FOR UNITED STATES AND CANADA, * * * *

ANDRE L. CAUSSE,

105 and 107 Hudson Street, New York City.

GEYER BROS.,

ROCHESTER, N. Y.

APPLES,
PEARS,
PLUMS,
PEACHES,
CHERRIES,
GRAPE VINES,
ROSES, ETC.

STOCK AT LOWEST WHOLESALE PRICES,

Correspondence Solicited.

Nurserymen's Stock Book

COMPLETE AND PRACTICAL.

Size, 16x21 inches—58 pages. **Heavy Ledger Paper.**

PRICES ON APPLICATION.

SCRANTOM, WETMORE & CO.,

ROCHESTER, N. Y.

When writing to advertisers mention The National Nurseryman.

ORDER EARLY.

...Higher
...Prices
...Later.

We still offer a

Superior Grade of STANDARD

PEARS . . . .

DON'T BUY BEFORE WRITING US.

BROWN
BROTHERS
COMPANY,

Continental Nurseries,

ROCHESTER, N. Y.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.

THE NATIONAL NURSERYMAN

January, 1895.

PAINESVILLE NURSERIES.

Fruit and Ornamental Trees,

Small Fruit and Grape Vines,

Shrubs, Roses and Bulbs,

Hardy and Tender Plants.

LARGE ASSORTMENTS NEW AND OLD VARIETIES.

UNEQUALED FACILITIES FOR PROMPT AND ACCURATE FILLING OF ALL ORDERS, LARGE OR SMALL. NO BETTER PLACE FOR NURSERYMEN TO SORT OR DEALERS TO PACK. IMMENSE CELLARS AND PACKING HOUSES. ORDERS BOOKED THIS FALL AND CARRIED IN CELLAR FOR EARLY SPRING SHIPMENT.

DECIDUOUS, UPRIGHT AND WEEPING TREES.

Large Stock of Splendid Trees at Low Rates, of

POPLARS—Carolina, Lombardy and Golden. MOUNTAIN ASH—European, Oak-leaf and Weeping. ALDER—Imperial, Cut-leaf and European. WILLOWS—Kilmarnock, New American, Rosemary, Babylonica, Laurel-leaf and Gold Bark. ELMS—American, Scotch, Red, Purple-leaf and Camperdown. LINDEN—European, Silver and Weeping. MAPLES—Silver, Norway, Ash-leaf, Wier's, Schwedlerii, etc. MAGNOLIAS — Acuminata, Soulangeana, Speciosa, Pupura, etc. MULBERRIES—Teas' Weeping, Russian, White and Black. Balm of Gilead, Purple Beach, Catalpas, Horse Chestnut, Larch, Russian Olive, Tulip, Flowering Thorns, etc., etc.

NUT TREES.

HEAVY STOCK, ALL SIZES.

CHESTNUT—American, Spanish and Japan. WALNUTS—Black, English and Japan. BUTTERNUTS English Filberts, Shell Bark Hickory, Almonds, Pecans, etc.

ROSES.

LARGEST STOCK IN THE U. S.

Hybrid, Perpetual, Moss and Climbers; strong field grown; better and cheaper than imported.

TREE ROSES for Fall Delivery; very fine.

BULBS for Fall Trade direct from the best Holland and French growers.

Highest Quality at Lowest Rates.

Always open to inspection. YOU are cordially invited to visit us. No trouble to price your list. Catalogues and price list free.

40th YEAR. 1000 ACRES. 28 GREENHOUSES.

The Storrs & Harrison Co.,

PAINESVILLE, OHIO.

THE LEADING NURSERY OF AMERICA.

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

ELLWANGER & BARRY, Proprietors.

Founded 1840.

Hardy Trees and Plants

OF EVERY DESCRIPTION.

FRUIT TREES.

SMALL FRUITS.

GRAPE VINES.

DECIDUOUS, ORNAMENTAL AND SHADE TREES.

EVERGREENS.

HARDY FLOWERING SHRUBS.

HARDY PLANTS.

HARDY ROSES.

GENERAL DESCRIPTIVE CATALOGUE superbly illustrated, also Wholesale List for the Trade—FREE.

FIVE BEAUTIFUL FULL PAGE CUTS OF

Carolina Wild Flowers

IN CATALOGUE OF

HIGHLANDS NURSERY,

Kawana, Mitchell Co., N. C.

(OLD P. O. LINVILLE, N. C.)

The Lowest Prices ever quoted are in our

MARCH "SPECIAL."

Nurserymen should not fail to send for it.

STANDARD AND DWARF PEAR,

APPLE, PLUM, CHERRY, RUSSIAN APRICOTS,

CUT-LEAVED WEEPING BIRCH.

And Low Budded Roses on Manetta Stock.

Prices Low and Stock Good.

Special Prices on Car Lots.

JAY WOOD,

KNOWLESVILLE, N. Y.

When writing to advertisers mention The National Nurseryman.

JACKSON & PERKINS,

Newark, Wayne Co., N. Y.

GROWERS OF

Choice Specialties for Nurserymen and Dealers.

WHOLESALE ONLY.

***OUR LARGEST SUPLUS** is in the following items:*

ROSES, extra strong and fine, mostly on own roots.

Balt. Belle.	Gen. Washington.	Maurice Bernardin.
Baron Bonstettin.	Giant of Battles.	Prince Camille.
Blanche Morreau.	Louis Van Houtte.	Princess Adelaide.
Car. de Sansel.	Magna Charta.	Seven Sisters.
Cl. Jules Margottin.	Marchioness of Lorne—(new and very fine).	

CLEMATIS, Strong, first-class plants; also a nicely selected medium grade at low prices.

Jackmannii, Henryii, Paniculata, and many others.

Honeysuckles, Hydrangea P. G., Japan Snowballs, Lilacs, Purple Fringe, Cut-leaved Birch, Catalpas, Horse-Chestnuts, Kilmarnock Willows, *Tea's Weeping Mulberry.*

EVERGREENS—*Austrian Pine, Scotch Pine,* large blocks of these to be sold at any reasonable price; on land that must be cleared.

American Arbor Vitæ and *Norway Spruce,* all sizes; thrifty, well-furnished stock.

500 Duchess d'Angouleme Dwarf PEARS. 500 Early Richmond CHERRY. 500 Prince Englebert PLUM—*the finest market sort.*

A nice lot of TWO-YEAR APPLES, at low prices to close them out.

☞Send for our COMPLETE Surplus List. Let us price your wants.

"MESSRS. JACKSON & PERKINS, Newark, N. Y.;

"Gentlemen:—We have received the Roses in excellent condition and find them to be excellent stock and far superior to anything we have had in that line before. We would like you to book our order for the following, etc.—Yours truly,

"PITCHER & MANDA, Short Hills, N. J."

N. H. ALBAUGH, Pres't. F. G WITHOFT, Vice Pres't.

The Albaugh Nursery and Orchard Co.,

HEADQUARTERS FOR

Budded and Whole Root Grafted Apples, Cherries, Plums,

AND A GENERAL ASSORTMENT OF NURSERY STOCK.

500,000 First-class Peach Trees for Fall 1894, of all the new and valuable varieties

AT LOWEST RATES,

☞We took first premium on Diamond (trade mark) Peach at World's Fair.

THE ALBAUGH NURSERY AND ORCHARD CO.,

TADMOR, OHIO.

SCARLET MAPLES, 9 to 10 ft.; **NORWAY MAPLES,** 9, 10 and 12 ft.; **CAROLINA POPLARS,** 5 to 18 ft.; **PEACH TREES,** including Ellison and Elberta; also **ASPARAGUS ROOTS,** 2 years, Barr's Mammoth and Conover's Colossal; **NORWAY SPRUCE,** 1½ and 3 ft., all fine bushy, on rented grounds. Prices low and must be moved this fall, or early next spring.

JOSIAH A. ROBERTS, · MALVERN, CHESTER CO., PA.



Electrotypes and Cuts

OF FRUIT TREES,
PLANTS, ORNAMENTALS FOR

Nurserymen, Florists, Seedsmen.

CATALOGUE OF FRUIT AND TREE CUTS FREE.
SEND FOR LIST OF OTHER CATALOGUES. 1000 PAGES.

Engravings of New Fruits made at Low Prices.

A. BLANC, Horticultural Engraver, 314 NORTH 11TH ST., PHILADELPHIA, PA.

When writing to advertisers mention The National Nurseryman.

1865. 1895.

JOHN CHARLTON,

University Avenue Nurseries,

ROCHESTER, N. Y.,

Offers for Spring of 1895, at very low prices:

10,000 Industry GOOSEBERRIES, 3 years; PRIME PLANTS.
1,500 Keepsake " 3 " " "
2,000 Whitesmith " NEW, 3 yrs. " "
6,000 CLEMATIS, 2 years, Jaekmanii, Henryii, Ramona, etc., etc.
4,000 " 2 " Panieulata (new), very desirable.
2,000 " " " Coeeinea and Crispa.
20,000 H. P. and MOSS ROSES, 2 years.
40,000 Conover's Colossal ASPARAGUS, etc., etc.
1,000 Cut-leaf WEEPING BIRCH, handsome trees, 9 feet.
900 " " " " " 7 to 8 feet.
100 Young's " " niee heads.
1,000 Oak-leaf MOUNTAIN ASH, elegant trees, 8 feet, *very cheap.*
500 Weeping " "
2,000 CALYCANTHUS, fine form, 3 to 4 feet.
500 CORNUS ELEGANTISSIMA, variegated, 3 to 4 feet.
300 DUTCH PIPE, stout, heavy plants.
2,000 PAEONIES, Premier collection in Western New York.
500 TREE PAEONIES, 2 and 3 years.
48,000 GRAPE VINES, fine, large, retailing plants.
6,000 Standard PEARS, in fine assortment.
DWARF PEARS, APPLES, PLUMS, Etc., none better.

Altheas, Azalias, Berberry purple, Deutzias, Eulalias, Filbert purple, Forsythia, Hydrangea P. G., Japan Quinee, Lilaes in variety, Purple Fringe, Strawberry Tree, Snowball, Japan Snowball, Syringa—eommon, golden, and variegated; Spireas in assortment, Tartarian Honeysuekle, Weigelas in variety, Yueeas, etc., etc. Catalpas, Chestnut Spanish, English Walnut, Judas Tree, Laburnum, Linden American, Magnolia ae., Prunus Pissardii, Purple Beech Silver Poplar, Salisburia Thorns double flowering; Willow, Rosemary, and New American; Akebias, Ampelopsis Veitchii, Begonia, Honeysuekles, Ivy American, Ivy English, Wistaria purple, etc., etc.

NURSERY STOCKS

OF ALL KINDS AND VARIETIES,

Such as Maples, Alder, Althea, Aucuba, White Birch, Catalpa, Honeysuckles, Nuts, Japan Quince, Deutzia, Ash, Broom, Walnut, Ligustrum, Philadelphus, Acacia, Currants, Willows, Sambucus, Spirea, Lilacs, Tamarix, Viburnum, Weigelia, and all sorts of Fruit Tree Stocks all 1, 2 or 3 years old or stronger plants, now offered at very low prices by

TRANSON BROTHERS' NURSERIES

BARBIER BROS. & SON, Succrs.,

For price list apply to ORLEANS, FRANCE.

KNAUTH, NACHOD & KUHNË, 13 William St., NEW YORK.

Surplus for Spring 1895

Immense stock of ASPARAGUS, strong 2-year roots, Palmetto, Barr's Phila. Mammoth, and the Conover's Colossal.

ALL AT LOWEST WHOLESALE RATES

Also, surplus of nice June budded PEACH TREES, chiefly the New Crosby, Champion, and Elberta.

ALEX. PULLEN, - Milford, Del.

Proprietor of the MILFORD NURSERIES.

When writing to advertisers mention the The National Nurseryman.

The North Star Currant.

The Best Grower . .
The Best Fruiter . .
The Best Seller . . .
The Best Red Currant

On Earth To-Day.

THE "NORTH STAR CURRANT" is a rapid grower, a very prolific bearer of large fruit, of a sweet delicious flavor, and yields a *sure crop* every year. The fruit does not shell or drop off nor does it scald. The "NORTH STAR CURRANT" has more strong selling points, backed by genuine merit, than any other specialty on the market to-day.

IF YOU WANT something new that will secure orders *with good margins*, try the "NORTH STAR." For full information and reduced prices, write the introducers.

The Jewell Nursery Co.,

LAKE CITY, MINN.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, France.

A general assortment of **Fruit Tree Stocks**, such as **Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc.** The largest stock in the country. Prices very low. Packing secured. Send for quotations before placing your orders elsewhere. Catalogue free. Agents for U. S America and Canada

C. C. ABEL & CO., P. O. Box 920, NEW YORK.

FOR SALE CHEAP.

3,000 PEACH, mostly Crosby, Champion and Elberta. Extra Fine.
3,000 CHERRY, 5 feet and upwards.
5,000 PLUM, mostly Abundanee, Wild Goose, Lombard and Green Gage.
300 APRICOTS.
5,000 APPLE, Ben Davis, and others.

All the above stock is extra fine in all grades. Write for Prices.

SUNNY SLOPE NURSERY, = McCUNE & HALL, Props.,
LOUISIANA, MO.

Apple Seedlings

Besides the regular grades of Apple Seedlings, I can supply a very nice grade of No. 1 and 2 **branched roots,** cheap; or would exchange for Pear, Peach, European or Japan Plum, or Prune.

Address, J. A. GAGE, Fairbury, Neb.

When writing to advertisers mention The National Nurseryman.



SECTION OF MOUNT HOPE NURSERIES.

ELLWANGER & BARRY, ROCHESTER, N. Y.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK.

Copyright, 1893, by the National Nurseryman Publishing Co.

VOL. II. ROCHESTER, N. Y., JANUARY, 1895. NO. 12.

TRADE IN KANSAS.

LAWRENCE, Kan., Dec. 15.—The trade in Kansas has been fully up to the standard of a year ago, in the number of trees shipped and under order. The only unsatisfactory feature being the low price. This being applicable to apple trees mainly. A tendency to stiffen the price is noticeable on top grades. And a general cutting of the plant for the spring of 1895 is the talk in all sections of Kansas, Iowa, Missouri and Nebraska. We think that here lies the kernel of the better and more satisfactory solution of our business when the balance is cast at the end of the season. Stocks are cheap. It costs but little to make a graft or bud a seedling, but the two and three years of after culture, ground rent, labor at old-time schedule (will say nothing of capital invested,) big stocks everywhere and customers for car lots very scarce, continue to be prominent features. No profits, or more likely business at a loss, is the result. With less acreage and better culture a greater percentage of first class stock will follow with better prices, pay rolls reduced and a feeling of thrift we all have known. A condition of things like the following would then not exist: A well-known Missouri firm sending a private circular to farmers, offering trees at lowest wholesale rate, thus utterly demoralizing the trade for salesmen by offering "a rare opportunity" in order to dispose of their surplus stock, at a price less than cost of production, to use their own language, of offering "to one and all, a privilege rare." This is certainly a case of bad congestion; for such a case we think better to burn a few thousand trees than ruin a good market. Cases of this kind may be looked for, until growers adopt different tactics by reducing their plants, etc.

A. C. Griesa has made various improvements during the year, the greatest being the connection of his nurseries with the city water works, laying nearly 2,000 feet of mostly two-inch pipe, below frost line, having hydrants at intervals, so that by laying surface pipes some twenty acres of land is brought into a condition in which it can be irrigated sufficiently to bridge over a dry spell.

We have just had the pleasure of having for our guests the well-known veteran in horticulture, as well as a nurseryman, S. D. Willard and his good wife, who are enroute to California. They were greatly pleased with the looks of things here. And when sampling the Gano, Ben Davis and other apples frankly admitted that New York could not produce their equal. Mr. Willard was also much interested in the new peach, Bokara No. 3, which tested at 28 degrees below zero, and a crop, is bound to enlist the attention of horticulturists who know a good thing when they see it. Silas Wilson of Atlantic, Iowa, says of it: "We have fruited it for many years, and we get peaches three years out of five." Here then with the Gano apple as the king of fruits, the Bokara peach, as the queen, and the Kansas raspberry sure to win its way to the front, of western origin, the West is all right. The gold out-put for 1894 for the United States was $43,000,000. The cattle product of Kansas alone, $42,000,000.

The tenth semi-annual meeting of western wholesale nurserymen will convene at Kansas City the 18th inst. These meetings are of great worth to the western fraternity.

WISCONSIN NEWS.

EVERGREEN, Wis., Dec. 15.—Hatch & Goff have started a fruit tree nursery at Sturgeon Bay, Wis. They expect to have the largest plum orchard in the state. Mr. Goff is connected with the experiment station of Wisconsin. Sturgeon Bay is in Door county, in the north-eastern part of the state. This part of the country has not been advertised much as a fruit growing section until lately. Some fine orchards have been started and there are a few large ones that are in bearing. Some of the finest fruit grown in the state comes from this section. One grower received a medal from the World's Fair for his apples. Our nurseries have been affected by statements of southern nurserymen who tell people that we have only wild stock because we are in Northern Wisconsin. There are only six varieties of evergreens growing wild here, and as we have about 200 varieties growing in the nursery, one can see we do not have much to do with wild trees. The Evergreen Nursery Co. reports that trade was very good last fall, in fact it was the best since the nursery has been running Their Christmas tree department had a better trade than last year. Said I. L. Buchan to-day: "The farmers of this county expect to plant many fruit trees next spring. We have a good many orders on our book now for spring. We are introducing a number of hardy varieties of apple. The seed was planted by my father, who is a professional gardener, some 18 or 20 years ago, and we got scions from the trees which are especially adapted to a cold country."

AT VINCENNES, IND.

VINCENNES, IND., Dec. 15.—We wish to contribute a word, on behalf of our part of the country, in praise of THE NATIONAL NURSERYMAN. We look forward to its coming each month with pleasure. The season with us,

just past, although it overreached our expectations, fell far short of our usual trade. We handled about the same amount of stock, but the prices were very much lower than usual. Our deliveries went off very well, and collections were better than we had anticipated. Our trade is both wholesale and with dealers. We have a large surplus of apple and cherry on hand for spring, but are short on most other things with the exception of strawberries, of which we have large quantities.

Our last spring's plant of apple grafts, and our bud of peach and cherry far exceeded any previous plant in this section, being about 800,000 apple, 150,000 peach, 100,000 cherry and 20,000 plum. Our buds have taken exceptionally well. The outlook for spring trade is very promising at present. At this time last year everything was dead as it possibly could be; now it is quite different.

We have changed our firm name since fall delivery from H. M. Simpson Co., to H. M. Simpson & Sons; Wm. Simpson of the old firm retiring, and H. M. Simpson's two sons, Robert A. and Harry D. Simpson coming in.

H. M. SIMPSON & SONS.

KANSAS HORTICULTURAL SOCIETY.

The Kansas State Horticultural Society held its 28th annual meeting in Fort Scott, on Dec. 11–13. The report of delegates on condition of crops, orchards, vineyards and small fruits in 1894, and prospects for 1895, showed that in many parts of the state the Ben Davis apple tree is dying out extensively; also the Willow Twig. The first named is more apt to fail in heavy soils. The condition of orchards is unusually good for 1895. A bountiful fruit harvest in Kansas for the season of 1895 was believed to be assured.

A paper by J. Nixon, of Kellogg, brought up the subject of the whole-root system. A vigorous discussion followed. A number of the members thought the "whole-root" business a fraud and an imposition upon the public. Major Holsinger, of Rosedale, said he was much surprised to find any intelligent Kansas fruit-grower advocating the fraudulent system of "whole-root" practice. A. Willis, of Ottawa, said that his experience with patrons wanting the so-called "whole-root" trees was unprofitable. The system was a delusive bait to catch those who were susceptible of being humbugged. A. H. Griesa, of Lawrence, said that those who advocated the "whole-root" system, or "oak root process," invariably misrepresented facts from beginning to end, and that all such were frauds upon the public.

E. J. Holman, of Leavenworth, introduced this resolution: "That the 'whole-root' theory is a humbug, a delusion and a snare." He denounced the various methods adopted by unscrupulous nurserymen to advance their personal interests at the expense of their customers, in the disposal of scrawny so-called "whole-root" trees, at three prices asked for honest trees by trustworthy nurserymen. Jacob Faith, of Montevallo, thought if it were not for the oily-tongued fruit tree agent, there would not be many orchards in Missouri to-day. Through them the orchards have largely been founded, notwithstanding the fact that a good many get humbugged at times. Secretary Brackett offered an amendment to Mr. Holman's motion: "That this society disapproves of the claims set forth by nurserymen in regard to the propagation of trees by the 'whole-root' system or theory." The amendment was lost, and Mr. Holman's resolution was adopted by a large majority.

Secretary George C. Brackett discussed the different varieties of strawberries, and suggested a conference of nurserymen of the state to secure a greater reliability and uniformity in the naming of plants.

The location of the principal office of the society was changed from Lawrence to Topeka. The next annual meeting will be held at Wellington.

After adjournment a special car carried the members to the residence of Colonel U. B. Pearsall, secretary of the Hart Pioneer Nurseries, where a reception and banquet were given by the colonel and his family, assisted by Mrs. Major Combs, Mrs. M. J. Coventry, and Mrs. H. B. Hart.

IOWA HORTICULTURAL SOCIETY.

The annual meeting of the Iowa Horticultural Society was held in Des Moines, December 12-13. C. L. Watrous offered a resolution directing that as much of the appropriation as was deemed advisable he expended in experimental work in the way of cross-breeding, testing new fruits, etc. He said that the honor of the society had been pledged to the legislature to expend this money in experimental work. Capt. Bacon and J. G. Berryhill urged the establishment of a central experiment station. J. M. Elder favored a complete re-organization of the experiment business, and G. B. Brackett agreed with him. R. P. Speer thought that the several experiment stations should be retained, and that a competent man should be sent around to inspect the stations. The society decided to devote $1,000 to experimental work. Among the papers read were the following: "Nursery Propagation and Management," by J. C. Ferris, Hampton; "Benefits of Cutting Back Trees and Shrubs in Nursery," by G. D. Thomas, Des Moines. A. F. Collman in a paper on "Climatic Modification of Fruits," said: "Iowa is very favorably situated; being about in the geographical center, east and west, and the vapor from the Atlantic and the lakes is carried west, from the Pacific east, and from the Gulf north, and meet the cold current of air from the North along the two great rivers which bound Iowa on the east and west. This cold current cools the atmosphere and the vapor falls in the form of rain, which accounts for the fact that Iowa has a greater rain fall than other states; we also have a thorough system of drainage by many rivers and streams which empty into

the Mississippi and Missouri rivers. All this accounts for the vigorous and healthful climate we enjoy. At the World's Fair we examined the Jonathan from Maine to Oregon. In the East we found it small, but good in quality, but our Iowa Jonathans were the very best in quality and color. West of the mountains we found them some larger, but inferior in quality. This we found equally true of all other fruits, so we believe that there is a great future for Iowa as a fruit state."

The *Iowa State Register* says: "The re-election of Prof. J. L. Budd to the secretaryship of the Iowa State Horticultural Society, while he was not a candidate for re-election, and was and is in the sunny South seeking restoration of general health by a winter's residence in that milder climate, was a grand tribute to Prof. Budd's great usefulness to that society and to all the people of Iowa. No other man has accomplished so much for the fruit growers of the state, and no person has been less modest as to his personal achievements."

OHIO HORTICULTURAL SOCIETY.

President George W. Campbell presided at the twenty-eighth annual meeting of the Ohio Horticultural Society in Columbus, December 12-14. Probably the most interesting part of the proceedings to a nurseryman were the reports on the behavior of new fruits. The Eureka raspberry was considered the greatest acquisition in that line since the introduction of the Gregg. The Eldorado blackberry was reported upon favorably. Professor Green thought the value of Minnewaski was not fully appreciated. Several spoke very highly of the size, beauty quality and productiveness of the Ohmer blackberry, introduced by N. Ohmer, introducer of the Gregg. It has never yet been known to be injured by cold. Professor F. M. Webster stated that he did not think there were any San Jose scales in Ohio. It was not considered advisable to plant the pit or seed where the tree should stand in the orchard.

MISSOURI HORTICULTURAL SOCIETY.

The annual meeting of the Missouri State Horticultural Society at Trenton, Mo., was a very successful one. One hundred and twenty delegates were present from all parts of the state, and several other states, including the president of the Michigan society and the vice-president of the Illinois society. Nearly all matters pertaining to fruit-growing were discussed. The root rot of the apple and the spraying for insects and fungus were among the subjects. The idea of taking more care in the propagation of trees was emphasized, and it was agreed that planters should be willing to pay for them when thus grown. The consensus of opinion was that the apple orchard trees on their own roots were the best. Breeding a hardier race of trees was deemed all important to the success of orchards.

CALIFORNIA POMOLOGISTS.

At the recent meeting of the Southern California Pomological Society at Pomona, Cal., the entomologist of the society, Professor A. J. Cook, in his report said: "The experiments of the season prove conclusively that the presence of the paper or cheese cloth covers of themselves are no bar to fruitage. In every case of covered twigs where the fruit was artificially or hand-pollinated, or where the sacks were removed for a short time to permit the visits of bees, or where bees were caught and put into the sacks, fruit was secured. I believe these experiments are conclusive and need no repetition. They show us that much of our fruit, especially plums, cherries and pears, are utterly dependent upon insects for pollination, and that while bees are not absolutely required, they alone can be depended upon to perform this important service. They also show that some of our fruit, notably olives, lemons, and some varieties of pears and oranges, while not wholly sterile to their own pollen are largely so, and will only bear full crops when cross-pollinated. They show just as conclusively that some fruits, like the Royal apricot and Naval orange, are entirely fertile with their own pollen. A person like Mr. Koebele should be kept constantly in search, in Australia, Europe, or the eastern states, for these beneficial insects. There are no doubt other Vedalias, and the salary and expense of the person in quest of them would be a mere bagatelle, compared with the possible, I may say probable, outcome. I make no apology in urging all fruit growers to unite in demanding that Mr. Koebele, or some other equally competent man, be kept for a period of years in search of other Vedalias or Rhizobii, that we may not only be rid of the cottony cushion and black scale, but of the red and yellow, the pernicious and purple, and all others, and shall not be forced to the expensive, unsatisfactory and unreliable methods of warfare heretofore thought valuable and necessary. Again, it goes without saying that immense good might come from a wise and timely distribution of even our native parasitic and predaceous species. Mr. Craw did admirable work collecting and distributing the Rhizobii, but it would be more than wise to keep close watch of our orchards that any valuable species might be distributed."

In an interesting report on scale insects, Miss Jean Loomis, of Pomona college, said: "Five years ago California was exceedingly disturbed over the scale insect question, and she had good reason to be. A soft white scale, introduced into a few orchards on imported nursery stock, had attained such proportions that it seemed likely to destroy our whole fruit industry. The story of the rise and fall of the cottony cushion scale is still fresh in memory, and we love to recall it only in connection with the lessons it taught us. The ladybird, Vedalia cardinalis, has many cousins and allies as ready as she to befriend us, if only we seek them out, and Icerya purchasi has a legion of confederates as ugly as he ready to slip in upon

us, if a day off our guard. Eternal vigilence is the price of fruit production in Southern California. When every orchardist has made himself acquainted with the facts in the case and knows the habits of the different species, then can we expect a complete riddance of the entire tribe. Our scientists and inspectors visit our orchards only once or twice a-year and are liable even then to overlook an important insect, which, if not understood by the orchardist himself, may before another visit reveal an alarming prevalence, as many insects have enormous powers of reproduction."

SOUTHERN ILLINOIS HORTICULTURISTS.

At the annual meeting of the Horticultural Society of Southern Illinois it was reported that the best pears for fall and winter are: Bartlett, Duchess, Anjou, Sheldon, Winter Nellis, Howell and Kieffer. George Gould, of Villa Ridge, thought that the best five peaches are Early York, Thurber, Old Mixon Free, Ward's Late, Smock. J. Webster, of Centralia, cited Mountain Rose, Thurber, Old Mixon Cling, Elberta, Red Heath. There is a difference in latitude of 100 miles between the locations of these gentlemen. The fruit growers were of the opinion that the outlook indicated a large fruit crop next year.

ONTARIO FRUIT GROWERS.

The annual meeting of the Ontario Fruit Growers' Association held at Orillia, Ont., December 4-7, was the most enthusiastic in the history of that association. Many horticultural authorities were present. The possibilities of the province as a fruit growing country were fully discussed. It is in the front rank of horticultural countries. Prof. C. C. James, Deputy Minister of Agriculture, in a talk on the benefits of the proper care of orchards, showed that if one cent a tree could be added to the present returns of the orchards throughout the Province, $10,000 would be the gain produced. Fertilization of flowers in orchard and vineyard was discussed by Professor Beach of the Experiment Station at Geneva, N. Y. A series of experiments conducted by Professor Beach showed that out of 117 varieties of grapes, 27 were able to fertilize themselves; 34 were able to produce a partial crop of fruit; 14 were able to set fruit which never developed, and the remainder could not fertilize themselves. Hybrids, especially, require to be set among other varieties, or fertilization cannot occur satisfactorily. One remarkable lesson from the experiment showed that sterile blossoms can respond to pollen of some other vine, as pears have been fertilized by apples, peaches by cherries, but the fruit was often seedless. With many varieties of apples there is no difficulty, but with others and with many varieties of pears, sorts that blossom at the same time should be planted together. The directors of the association are: W. S. Turner, Cornwall; R. B. Whyte, Ottawa; George Nicol, Cataraqua; W. Boulter, Picton; Thomas Beal, Lindsay; William Mitchell, Woodstock; W. Orr, Fruitland; A. M. Smith, St. Catharines; E. A. Chapin, Brantford; J. A. Morton, Wingham; T. H. Race, Mitchell; A. McNeil, Windsor; G. C. Caston, Craighurst; auditors, A. H. Pettit, Grimsby; George Fisher, Hamilton.

WESTERN NEW YORK HORTICULTURISTS.

The annual meeting of the Western New York Horticultural Society will be held in Rochester on January 23d. Following is the programme, to which some additions will be made:

"Some Fungous Diseases of Plants,"
Prof. Byron D. Halsted, Botanist and Horticulturist, New Jersey Agricultural College Experiment Station, illustrated with lantern slides.

"Home-Mixed Fertilizers,"
Dr. G. C. Caldwell, Professor of Chemistry, Cornell University, Ithaca, N. Y.

"Nature's Remedies for Diseases in Fruit Culture,"
Walter F. Taber, Poughkeepsie, N. Y.

"The Exhibit of Fruit at the New York State Fair,"
H. S. Wiley, Cayuga, N. Y.

"A New Plum Pest and Other Insect Notes,"
M. V. Slingerland, Assistant Entomologist, Cornell University, Ithaca, N. Y.

"Culture of the Peach and the Apricot in Western New York,"
Nelson C. Smith, Geneva, N. Y.

"The San Jose Scale,"
F. A. Sirrine, New York Agricultural Experiment Station, illustrated with lantern slides.

"Conservation of Moisture,"
Prof. I. P. Roberts, Director of College of Agriculture, Cornell University, Ithaca, N. Y.

"The Evolution of Tillage,"
Prof. L. H. Bailey, College of Agriculture, Cornell University, Ithaca, N. Y.

"The Value of our Native Grapes,"
George C. Snow, Penn Yan, N. Y.

"Recent Experience of an Eastern Fruit Grower in California,"
S. D. Willard, Geneva, N. Y.

"One Thousand Dollars from an Acre of Blackberries,"
C. E. Chapman, Peruville, N. Y.

"The Larvæ of the May Beetle—Its Damage Among Small Fruit Plantations,"
L. J. Farmer, Pulaski, N. Y.

"Score Cards for Judging Fruits,"
L. Woolverton, Grimsby, Ontario, Canada.

"Ornamental Trees and Shrubs, which have Proved Hardy at Ottawa,"
Prof. Wm Saunders, Director Central Experiment Farm, Ottawa, Canada.

"Pear Blight,"
M. B. Waite, Assistant Pathologist, Department of Agriculture, Washington, D. C.

"Miscellaneous Chemical Notes on Fungicides, Adulterations and Fertilizers,"
Dr. L. L. Van Slyke, Chemist, New York Agricultural Experiment Station, Geneva, N. Y.

"Plant Diseases,"
Prof. S. A. Beach, Horticulturist, New York Agricultural Experiment Station, Geneva, N. Y.

A PLANTER SEEKING KNOWLEDGE.

Martin Woodall, a planter, at Netewaka, Kan., has asked Secretary Coburn of the Kansas state board of agriculture these questions;

1. Are budded apple trees much superior to grafted ones?

2. Can we convince ourselves, when we receive the trees at the depot, that they are whole-root instead of piece-root?

3. Is it practicable, and good farming, to plant young trees in the same spot where apple trees were planted twenty-two years ago, and dead three or four years ago?

4. The agent claims that trees will do just as well in the blue grass sod as in well cultivated land, and that it is injurious to the apple tree to be cultivated, for it grows too fast.

5. Can an agent guarantee that the trees he will sell are proof against borers?

6. We can buy trees at 7 cents apiece; he charges $5 per dozen. Do you think his trees are much superior?

7. Is it not possible for this agent to deliver to us inferior trees?

8. Cannot we buy just as good trees from our home nurseries as from eastern firms?

9. We tell the agent that it is the climate that kills our trees; he says it is the bad trees. Which is correct?

10. He is selling a Russian apple tree. Is it not a fact that the so-called Russian apple tree is a fraud?

The following answers prepared by Professor S. C. Mason of the State Agricultural college at Manhattan, Kan., have been published by the *Kansas Farmer:*

1. Budded apple trees possess no advantage to the purchaser over grafted trees. The practice of budding is wholly one of convenience to the nurseryman.

2. It would take a practical nurseryman to distinguish surely between trees worked on whole roots or on pieces, and the value of the tree does not depend upon these points. A well-grown tree with straight, clean trunk, well-balanced top and an abundance of branching and fibrous roots, is the one to select, whatever its mode of propagation.

3. A young orchard had much better be set on a piece of ground not before occupied by apple trees. I know of a case to the point where the young orchard covers the land occupied by the old one, and also a few rows on new land adjoining. You could pass by in the road and tell to a row where the old orchard ground ends, and the new land begins.

4. The best orchard-growers advise keeping the young orchard planted to some crop requiring clean cultivation, such as corn, beans or potatoes, till it comes into bearing, then seeding down to red clover or orchard grass. Blue grass or anything making a close, compact sod, should never be allowed in an orchard. It sheds water like an oil-cloth, while clover renders the ground loose and ready to receive rain, and its roots prepare the way for the fine fibres of the apple roots to take hold of the soil.

5. The agent who represents his trees as being proof against borers, blight or any other devastation common to fruit trees, shows evidence of intent to defraud and should be hustled on his way.

6, 7, 8. I prefer to answer these questions together. The farmer can buy all the first-class two-year-old apple trees of standard, well-tested varieties that he can haul home for 7 or 8 cents apiece. Why is it that so many will listen to the oily-tongued tree peddlers, who ask four or five prices for budded trees, and whole-root trees, and frost-proof trees, and blight-proof trees, and borer-proof trees, and trees bearing strange and wonderful fruits, and trees bearing two crops a year, can only be explained by the theory of the lamented showman, P. T. Barnum. He said that the American people liked to be humbugged. When the average farmer will read carefully the farm and horticultual papers of his section of the country, and the reports of his state horticultural society, make his selection of varieties in accordance with what he finds recommended there and buy his trees of his nearest reliable home nurseryman, then the oily-tongued rascal will disappear from the land and the honest representative of a reliable nursery will not be in danger of having the bull dog set on him when he calls to solicit the farmer's orders. There are hundreds of acres of the finest sort of apple trees grown in Kansas every year, and shipped in car-load lots to eastern nursery firms. How many of these find their way back here again in the filling of retail orders? It would make "mighty interestin' reading," if we could know. The farmers themselves are to blame for the present condition of things. As long as a man can sell goods by offering something marvelous, either in trees, fruits, vegetables or flowers, there will be plenty of men in business with just those lines of goods (on paper), and the careful, conservative dealer and grower will suffer in proportion.

9. There is probably no country on the face of the earth where a young orchard of carefully-selected trees, well planted and well tended, will do better than in Eastern Kansas. They come quickly into bearing and are quickly old and unprofitable. About twenty or twenty-five years may be considered the life of an orchard in this state, and plans should be made to have others coming on to replace them. No patent method of propagation or new-fangled stock will prolong the life of a Kansas orchard much beyond this age.

10. There have been a large number of varieties of apples introduced from Russia into the United States and Canada. Many of them possess great hardiness, rendering them of considerable value in the cold northern portions of our country. Very few of them are equal in quality to our old and well-tested sorts. None of them are worth paying fancy prices for, or planting in great numbers.

J. H. Settlemier, Woodburn, Ore.—"We consider yours the most valuable paper which comes to our desk."

OFFICERS ELECTED.

California State Horticultural Society—Honorary president, Professor E. W. Hilgard; president, B. M. Lelong; vice-president, Leonard Coates; treasurer, Rev. A. T. Perkins; secretary, Professor E. J. Wickson. Board of directors chosen: S. J. Stabler, Leonard Coates, C. H. Allen, Howard Overacker and J. L. Mosher.

Kansas Horticultural Society—President, Judge F. Wellhouse, of Topeka; vice-president, J. W. Robinson of El Dorado; secretary, Senator Edwin Taylor, of Rosedale; treasurer, Major Frank Holsinger, of Rosedale.

Grand River Valley, Michigan, Horticultural Society—J. A. Pearce, president; H. O. Braman, vice-president; Chase Phillips, treasurer; T. L. Brown, secretary; executive committee: C. W. Garfield, E. Manley, A. W. Slayton, S. S. Bailey, H. H. Hoyse, Mrs. E. Arnold and Mrs. J. Graham.

Southern Illinois Horticultural Society—President. R. T. Fry, Olney; secretary-treasurer, E. G. Mendenhall, Kinmundy; vice-presidents, J. Webster, Centralia; J. W. Fuller, Anna; L. N. Beal, Mt. Vernon.

Missouri Horticultural Society—President, J. C. Evans, North Kansas City; vice-presidents, N. F. Murray, Oregon; Samuel Miller, Bluffton; secretary, L. A. Goodman, Westport; treasurer, A. Nelson, Lebanon.

Ohio Horticultural Society—President, E. H. Cushman, Euclid; vice-president, Professor W. R. Lazenby, Columbus; secretary, W. W. Farnsworth, Waterville; treasurer, N. Ohmer, Dayton.

Ontario Fruit Growers' Association—President, Murray Pettit, Winona, Ont.; vice-president, W. E. Wellington, Toronto; secretary, L. Woolverton, Grimsby.

TRUE STOCK.

I started in the nursery business sixteen years ago, then making a specialty of strawberry plants that were first-class and true to name. In connection with the nursery business, in 1883 I commenced the seed business, making a specialty of true second crop seed potatoes, which have proved to be the best seed potatoes that were ever put on the market. My trade has increased rapidly. I have many orders for spring, and the prospect is good for a large spring trade. We have a large stock to offer to our customers this spring that is first-class and true. There are a great many nurserymen in the business (especially in the strawberry plant trade) who send out many mixed plants. I have bought plants several times from nurserymen who said that their plants were true to name, and when I planted them, and they began to grow, I found that they were badly mixed.

Now I do not believe that these nurserymen are dishonest, but do believe that there are some in the business that cannot tell one variety from another. Mixed plants are a great disappointment to the berry growers.

J. W. HALL.

Marion Station, Md.

Among Growers and Dealers.

J. Austin Shaw, well-known as a nurseryman, has entered the stock exchange business in New York city.

Fifty-two years ago E. H. Reynolds began the cultivation of fruit and ornamental trees. In 1888 he established the Michigan Nursery Company.

Mr. Pennock of Larimer county, Colo., has sold his general nursery stock, that he might have more time to devote to his adopted occupation of propagating and improving fruits, from the wild stock of the mountains.

The Framingham Nursery Company, South Framingham, Mass., has recently erected a new packing house and a new greenhouse. Charles B. Merrill is president, H. B. Clewley treasurer and William B. Whittier general manager.

The firm of Kirk, Wild & Kimber, Salem, Ore., has been dissolved. W. H. Wild and George W. Kimber have withdrawn and L. M. Kirk will continue the business under the old name of the Capital City Nursery Company.

Irving Rouse returned last month from a trip to France. He was absent six weeks. He made the usual shipment of stock to this country, with the exception of pear seedlings which he says are very scarce. During the last week in December he received twelve car loads of seedlings from France.

The R. G. Chase company of Geneva, N. Y., has been incorporated with a capital stock of $76,000. The directors are: Roscoe G. Chase, Orville G. Chase, John L. Bennett, of Geneva; George Chase, of Malden, Mass., and Howard A. Chase, of Philadelphia. The new company succeeds R. G. Chase & Co., established in 1860. It has offices in Boston and Philadelphia The Geneva office is in the charge of John L. Bennett, who has been with the company for fifteen years. George R. Watson has recently been engaged to have charge of the agents' correspondence from the Geneva office.

Professor L. H. Bailey in his report to the New York State Commissioner of Agriculture on the condition of peach growing in Western New York, states that nine thousand acres in that section are devoted to peach growing. He thinks that this industry more than any other pomological interest suffers from careless methods: First, lack of cultivation; second, inattention to borers and yellows; third, neglect to thin fruit; and fourth, carelessness in marketing.

Dewain Cook in an article in the *Northwestern Agriculturist*, urging farmers to join their state horticultural society says: "Join the society and thus get what is already in part your due. It will use you better than it promises. Don't begrudge the dollar paid. The next tree agent who comes along is liable to beat you out of more than enough to pay for a life membership, provided he is a little bigger liar than the last one. Tree agents give members of horticultural societies a wide berth."

ASA D. BARNES.

Asa D. Barnes was born on September 5, 1852, in a log house near the town of Leroy, in Dodge county, entered from the government by his parents, Horace and Phoebe Barnes, in the fall of 1846. This worthy couple emigrated from Onondaga county, New York, and were among the earliest of the settlers of that section of the state who braved the hardships of a pioneer life. Their riches consisted of strong hearts, good constitutions, unswerving fidelity to each other and good, old-fashioned Scotch and Irish blood. Both these worthy pioneers are yet living, enjoying a degree of health unusual for people of their age, in their comfortable home seven miles from the old homestead; with six married sons and their families around them, and three daughters. A. D. Barnes is the second of eleven children, all born in the same house and brought up on the same farm. He acquired the limited education afforded by irregular attendance at a small public school, when between the ages of eight and sixteen years. Before he was twelve years of age he was an enthusiastic horticulturist, evidently born one, having planted, trimmed, budded and grafted many varieties of fruits, and had at that age a complete nursery in the garden. His delight was in the planting of fruit trees, and at the age of twenty he was an expert in planting and pruning. At the age of twenty-one he followed the example of his parents and started out for the frontier, locating a homestead on January 1, 1874, in Filmore county, Nebraska. He took an inventory of his possessions that day and found them to consist of a good constitution, a determined will and ten dollars in cash. He held down his claim the first year in a dug-out, a cellar in the side of a hill with door and window; the second year in a sod house; the third in a small frame shanty. The fourth year he built a comfortable house, and on September 30, 1877 married the district school ma'am, Miss Susan Wheeler. The day after the marriage his wife went to the school room and he to the plow. He was identified with many public enterprises in the new settlement, planting the first fruit trees in the vicinity, breaking up and improving three farms, and planting thousands of trees on that vast prairie. He planted the first nursery in that country and lost the entire stock by drouth. Discouraged, he traded his farm in Nebraska for a farm near Fond du Lac, Wisconsin, farmed it two years, and then returned to his first love, the nursery and fruit business, which, by the way, he should never have left.



ASA D. BARNES.

In the spring of 1887 Mr. Barnes started the now famous Waupaca Arctic Nursery and Fruit Farm. This fruit farm constitutes a plat of sixty-five acres, partly inside and partly outside the city limits, half of which is planted in nursery stock; the remainder is in orchard. In this orchard grew the world's Fair premium apples. Mr. Barnes has nearly nine hundred acres of land and employs from ten to forty people.

Besides an orchard of 1,200 apple trees, Mr. Barnes has one thousand other trees, including many pear and plum trees, also a splendid vineyard, which contains the Premium seedling grape; several acres of small fruits, and also 50,000 nursery trees on his home farm. This year he grafted over 40,000 apple grafts, many of which are new, hardy Northern Wisconsin seedlings. The key to his success lies in the fact that he devotes attention to acclimation and judicious cultivation. He has had to face many difficulties, dry seasons, with rough, stony country, new land, long, cold winters, with temperature at times as low as 46 degrees below zero. He should feel proud of his success.

Mr. Barnes is well known in the West as a lecturer on horticultural topics.

The State Board of Horticulture estimates that the orchard area in California has been increased the present season by 35,000 acres planted to various kinds of fruit.

When the potato is grafted on the tomato, which can be done by reason of the close relationship between the two plants, the potato roots continue to produce potatoes, while the tomato grafted on the potato stalk continues to produce tomatoes, says *Meehan's Monthly*. This is considered in some of the agricultural papers as remarkable, that one plant should produce two different kinds of products; but it is no more remarkable than all other experiences in grafting. A pear may be grafted on the quince, but the roots are still quince roots, although pears come from the grafted portion.

The National Nurseryman.

C. L. YATES, Proprietor. RALPH T. OLCOTT, Editor.

PUBLISHED MONTHLY BY

THE NATIONAL NURSERYMAN PUBLISHING CO.,

305 COX BUILDING, ROCHESTER, N. Y.

The only trade journal issued for Growers and Dealers in Nursery Stock of all kinds. It circulates throughout the United States and Canada.

OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

SUBSCRIPTION RATES.

One Year, in advance,	$1.00
Six Months,	.75
Foreign Subscriptions, in advance,	1.50
Six Months, " "	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Entered in the Post-Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., JANUARY, 1895.

TWO YEARS OLD.

With this issue THE NATIONAL NURSERYMAN completes the second year of its existence. Like all things which are appreciated, it has had to make its own way in the face of difficulties. Two years ago the nurserymen of the country were without a trade journal devoted exclusively to their interests. They were beginning to feel the need of one, and when THE NATIONAL NURSERYMAN appeared, it was warmly welcomed by the more progressive members of the trade. But to many the idea of a representative trade paper published in the interests of all nurserymen and not for the furtherance of one man or one firm, was so new, so at variance with what had been attempted now and then by an over-zealous advertiser of a special line, that they refused for a time to believe that this was not a repetition of such a scheme. But those very persons have been forced to admit that no trade has a better exponent than their own. There are still in circulation one or more publications purporting to be journals, but if the most casual reader did not discern the difference at a glance, the postage stamps required to carry them would show that the government refuses to transmit them in the mails, unless fully prepaid in the manner prescribed for all private advertising devices.

THE NATIONAL NURSERYMAN has ever been modest in advancing its claims to recognition. Its publishers have preferred to let the journal speak for itself, and that it has done so in no uncertain tone is evidenced by its advertising columns, which have contained from the start the announcements of nearly all the leading firms in the country. Hundreds of letters attest the popularity and value of its news columns. It has the confidence and the endorsement of the men who are the acknowledged leaders in the trade as well as those who have but recently entered it.

The opening of a new year and the anniversary of the journal are perhaps sufficient excuse for this reference. It is with confidence in the benefits to be derived that we urge all who have not subscribed or who have not renewed their subscriptions, to lose no time in securing for the coming year a journal which the publishers promise to increase in value, and which will prove not merely a means of entertainment, but a sound business help.

NATIONAL IRRIGATION MOVEMENT.

One of the most important movements of the time from a nurseryman's standpoint as well as from that of many others, is the undertaking of the National Irrigation Congress. The irrigation movement in the United States has attained the dignity of a national question. Fred. L. Alles, secretary of the National Irrigation Congress in a recent address said: "The public lands of the United States, fit for cultivation under ordinary conditions, have been exhausted. In their eagerness to obtain homes upon government lands thousands of men have taken up homestead claims upon the semi-arid acres of Western Kansas and Nebraska, and in portions of the Dakotas, and for many years have been waging a steady fight with droughts and hot winds, always with the result that in the end they are driven from these lands, often penniless, and turned out with their families to attempt to seek new homes further west. In the United States there are to-day about 1,200,000,000 acres of arid and semi-arid lands, of which about 500,000,000 acres remain in the hands of the general government, the balance being the property of corporations, railroads, private individuals and the several states. Of this 500,000,000 acres it is estimated that about 20 per cent.—or 100,000,000 acres—can be reclaimed and made fit for human habitation and the support of many millions of people. How best to reclaim these now worthless lands by placing upon them the now wasting waters of the mountains of the West, and, after reclamation, to place upon them the thousands upon thousands of homeless families now living in the congested population centers of the East, is the problem with which the National Irrigation Congress is attempting to deal."

When the results of the efforts of the congress shall have been felt, one of the first subjects to which those who shall occupy reclaimed lands will turn their attention, will be the purchase of large quantities of nursery stock. Therefore the operations of the irrigation congress will be watched with a friendly interest by nurserymen generally.

The first National Irrigation Congress met in Salt Lake City in September, 1891, and considered only one side of the question; the cession of the arid land to the states with the idea that if that were done the various legislatures would provide for the necessary irrigation. Beyond the agitation of the question little resulted from the

Salt Lake congress. The second congress was held in Los Angeles, in October, 1893. This congress dropped the question of national cession and dealt with methods of irrigation, cost and duty of water, government control of water sources and questions of like character. The result of this congress was the appointment of a commission of five persons in each of the 17 arid states and territories, who were authorized to report at the next congress on the local conditions in each state.

The third National Irrigation Congress was held in Denver, in September, 1894. In calling the delegates to this meeting it was decided by the national executive committee to make it a purely American Congress, uniting all irrigation interests from British Columbia to Mexico, and with this end in view Secretary of State Gresham was asked to invite the governments of Canada and Mexico to join in discussing questions affecting the settlement of the arid lands of North America. Each of these governments promptly responded by sending an intelligent and representative delegation of skilled engineers to Denver, and the gentlemen took a prominent part in all the discussions and deliberations affecting their respective governments. In addition to delegates from every one of the 17 arid states, gentlemen were in attendance from Missouri, Illinois, Wisconsin, Minnesota and Rhode Island, and strong letters of encouragement were sent from Florida and Georgia. The delegations were thoroughly representative in character, being composed of prominent citizens, both in official and private life, and the congress numbered among its members United States senators, governors, and members of congress. It showed in its groupings and makeup that the whole country is aroused over its possibilities. Leading newspapers of the eastern cities, including New York, Chicago, Boston and St. Louis, contained lengthy editorial comments on the proceedings of the congress, which were telegraphed across the country daily by the Associated Press agents. The congress, in its final resolutions, asked for the repeal of the desert land law, and for government survey of water sources, catchment basins, and storage sites. It also asked for the appointment of a national irrigation commission to have charge of all irrigation work national in its character, as under the present law a portion of the money appropriated by congress for irrigation inquiry is expended by the Department of the Interior, and a portion by the Department of Agriculture, and no good results can be expected from this division of the work. An international commission was also suggested to adjudicate questions arising between Mexico and the United States on the south, and between Canada and the United States on the northern border.

The fourth National Irrigation Congress will meet in Albuquerque, in September, 1895. It will deal largely with the local legislation needed to secure the benefits of the Carey law. The work being done by the congress is supervised by a national executive committee of one member from each western state and territory, the chairman of which is William E. Smith of the *Irrigation Age*.

The main points of the Carey law are that it gives to any state the right to select tracts of arid public land—up to one million acres—first filing with the Secretary of the Interior a plat of each separate tract of such land and a map showing the sources of water supply to be used in reclaiming the land. On approval by the Secretary, the state is authorized to place water on the land, sell it to actual settlers in tracts not exceeding 160 acres, and when proof is filed by the state that the land has been reclaimed, and that at least twenty acres of each quarter section are in cultivation, and that it is actually occupied by a settler, the government will issue a patent for the land. The title in all cases is to pass through the state direct to the settlers, but the price paid for the land is to go direct to the state.

The undertaking of the National Irrigation Congress is one of great importance. It is sure to be successful and the result will be the rapid extension of all kinds of business into territory now practically excluded. Landscape improvement and the planting of large commercial orchards will be primary steps in the occupation of these once arid regions. It is not too much to predict, says Mr. Alles, that the highest civilization of the North American continent to be shown by the coming century will be found within the limits of what is now an almost virgin desert, starting from the eastern line of the great plains region, touching the one hundredth meridian, and extending west across mesas and mountain valleys to the white foam which fringes the waves of the restless Pacific.

N. S. Platt, of Cheshire, Conn., says: "I have fruited the Champion peach this year for the first time. Compared with an older tree of Mountain Rose beside it, the time of ripening and size of fruit is the same. In two important particulars, however, the Champion is superior to Mountain Rose. It is much better in quality, and the fruit buds appear to be hardier. This was a year of a scant crop of peaches here, and the fact of the Champion trees being two or three years planted, giving as much or more fruit to the tree than the Mountain Rose of twice the age and size, indicates that it is a surer bearer."

A number of horticulturists remembering at the holiday season the immense advantage derived from the introduction of the Concord grape, the originator of which E.W. Bull, of Massachusetts, received nothing for it, sent Mr. Bull a purse of money collected at agricultural and horticultural society meetings. Mr. Bull is an inmate of an old people's home in his native state.

THE report of the reception to Dean Hole, of England, by American horticulturists, in our last issue was taken from *The Florist's Exchange*.

Frank R. Pierson, of Tarrytown, N. Y., is general agent for Europe and America, of a consolidated company of the largest lily bulb growers in Bermuda.

NOTICE TO WASHINGTON NURSERYMEN.

The Washington State Board of Horticulture has sent the following notice to all the nurserymen in the state:

Please take notice that Rule 1 of the Rules and Regulations of the State Board of Horticulture, requires that all agents, dealers, nurserymen or persons selling or distributing nursery stock, shall before making such distribution notify the members of the board in whose district such articles are found, and, if shipped into this state, immediately after their arrival.

Rule IV has been amended to read as follows:

Formula No. 1. All nursery stock shall be disinfected by dipping in a solution of one pound lye (American Lye Co. brand) and one pound whale oil or other strong soap, one pound of tobacco and one-fourth pound of sulphur to every seven gallons water, or till thoroughly dissolved, and applied at about 103 degrees Fahr., in a vat or trough made for the purpose.

Formula No. 2. Nursery stock may also be disinfected by covering with an air tight tent or box, and for each and every 100 cubic feet of space therein, one ounce of fused cyanide potassium (58 per cent.) one fluid ounce of sulphuric acid and two fluid ounces of water shall be used. The cyanide of potassium shall be placed in an earthenware vessel, the water poured over the cyanide of potassium, afterwards adding sulphuric acid, and the tent or box to be immediately closed tightly and allowed to remain closed not less than forty minutes. Treatment for disinfection shall continue until all insect pests or their larvæ are destroyed.

The address of each member and the names of counties embraced in each of their districts are given on enclosed circular.

The above formulas for disinfection have also been adopted by the Northwestern Nurseryman's Association.

AT NEWARK, N. Y.

NEWARK, N. Y., Dec. 15.—Said Jackson & Perkins today: "With us spring trade is opening up most auspiciously. The responses to such offerings as we have already made seem to indicate increasing demand in nearly all lines, which of course can not help but soon bring about a general improvement in prices. In several lines our surplus has been decreased more than one-half within a month. Fall sales were larger than ever before, but probably for the reason that we had larger stocks than heretofore and made extra efforts to dispose of them. Prices ruled extremely low. While we shall considerably reduce our plantings of some lines we shall make corresponding increases in others so that total acreage will remain about the same or slightly increased perhaps. The growing season here was more than usually favorable. The abundant rains in the early summer gave stock a fine start and enabled it to withstand subsequent dry weather without injury."

E. P. Beebe, a nurseryman and florist of Elizabeth, N. J., has been in town some time, visiting his aged mother and attending to some business matters. He speaks of trade in his vicinity as being much below the average of other years.

E. Richmond packed here in town last fall. He reports fair sales considering the season.

Mr. Maloy, of Ellwanger & Barry's, was in town a few hours recently on business with Jackson & Perkins.

NEW JERSEY HORTICULTURAL SOCIETY.

The 20th annual meeting of the New Jersey Horticulcultural Society will be held in Trenton on January 2-3. Among the subjects to be discussed are the following:

"Is it Advisable to Plant Commereial Orehards of Apples in New Jersey, and the Best Varieties?"
Emmor Roberts, Fellowship.

"Irrigation of Fruit Culture, or the Most Practicable Methods to Make Fruit Growing Profitable,"
J. H. Hale, South Glastonbury, Connecticut.

"What New Fruits and Vegetables are Likely to Prove Valuable Aequisitions?"

"My Experience with Japan Plums,"
Charles Black, Highstown.

"Blights and their Remedies,"
Prof. Byron D. Halstead, State Botanist.

"The Future Outlook for Fruit Culture,"
Hon. George T. Powell, Ghent, N. Y.

"Is it Advisable to Plant More Peach Orchards in New Jersey for Market Purposes and Best Varieties to Plant,"
E. P. Tomlinson, Stockton.

"Some Reeently Introduced Insects of Hortieultural Interest,"
Prof. John B. Smith, State Entomologist.

"Intensive Hortieulture,"
Rodolfos Bingham, Camden, Wm. H. Goldsmith, Newark.

"Is it Advisable to Plant Commercial Orchards of Chestnuts in New Jersey and the Best Varieties?"
Charles Parry, Parry.

THE BORER NOT THE FIRST CAUSE.

We find this insect (Saperda bivittata) the same that works in all timber, and the wood-worm, as called in all forest timber, is never found in any thrifty, vigorous growing timber of any kind. The growth must be checked sufficiently by some cause to place the tree subject to the borer. In other words, the sap must go through a chemical change, or fermentation before the wood becomes in proper condition as food for the insect. The growth may be checked from many causes, viz: extreme drought, trees standing in hard sod, the want of proper fertilizer, bruises, wounds, and last, but not least, the white grub is one of the worst insect pests the orchardist has to contend with, and the least understood. The white grub is out of sight, but its work of destruction might be said to be perpetual, as it eats on the fiber roots as fast as these roots grow out, and I have found roots one inch in diameter that were girdled of all the bark for three or four inches in length. After the grub and other causes have placed the apple and other trees in proper condition, then comes the borer to claim its portion of the tree for food.

Marceline, Mo. S. H. LINTON.

WILD FRUITS IN THE ROCKIES.

Perhaps the greatest drawback to the nurseryman attempting to do business in the vicinity of the Rocky mountains, is the great abundance of natural fruits of decidedly superior quality. The people have been accustomed to securing their fruit supplies from the mountains, just as did the freighter overland in the early days expect to obtain his fuel supply from the buffalo chips that covered the plains. These wild fruits consist of raspberries, both red and black; gooseberries, currants, red, black and yellow; strawberries, some as large as walnuts; service berries, or, as is known to the trade, June berries, both of the tree and dwarf varieties; choke cherries, buffalo berries, red and yellow; huckleberries, wild plums and in some of the favored valleys, wild grapes. The plums when in their best state have been pronounced of excellent quality by competent authority. In some valleys there are also wild olives that appear to be fully as promising as the Russian olives. Of these the strawberry, raspberry, gooseberry, service berry, buffalo berry and the mountain huckleberry will well repay experimentation, as we are convinced the quality originally is well worth cultivation, leaving out of account the advantage to be derived from the improvement that is the usual result of civilization and cultivation.—*Field and Farm.*

CHESTNUT CULTURE.

J. W. Kerr, of Denton, Md., says in the *Rural New Yorker:* American nut culturists are vigilantly looking about for the most profitable variety of chestnut for commercial purposes. Size and quality of the nuts alone considered, there are already several introductions that to a large extent meet that want; notably the Paragon, which has extra size, great productiveness, vigorous growth, precocious bearing, and fair quality to commend it. Yet in two important particulars, it fails to meet the requirements for a commercial chestnut. Its season of ripening is too late (but here it is earlier than either Numbo or Ridgely). Its season possibly may, to some extent at least, be the cause of the second effect, which is its liability to injury from the chestnut weevil. Out of 100 nuts, taken as an average sample of a bushel, 14 were defective from this cause. While on the other hand, those of the Japan type, were entirely exempt from such injury, due, as I believe, more to season of ripening, than to burr formation or any other cause. They ripen very early (in September here); but for eating out of hand, they are not satisfactory; this, however, would not serve to rule them out as commercial nuts, if they are satisfactory when cooked. In several trials, of both boiled and roasted nuts, I found them to be equally palatable with the pure American. In my opinion, the chestnut for commercial growing in this country, will be one of the Japanese strain. I base this opinion on its freedom from weevil injury as compared with the improved kinds of the Spanish strain. It is a reasonable presumption that as more chestnuts are grown—if of a strain that breeds weevils—difficulties will increase. Experience in a general way demonstrates that injurious insects waste no opportunities—presented by fruit growers—to multiply and reproduce their kind.

APPLES IN SCOTLAND.

A correspondent in Glasgow writes Stark Brothers as follows: "Fruit here is rarely eaten by the common people, except when some brave youth has risked being jailed and, under the cover of night, stolen a pillow-slip full. The orchards are watched like a jeweler's store in America, and the pains and penalties for picking even a fallen apple are excessively severe. Our apples are generally good and retail at from 7 to 15 cents per pound. Those from the United States are always most in demand and bring the highest prices. Notwithstanding the great increase in imports from New York, Philadelphia, Chicago, and other places, fruit is exceedingly scarce, and the common people never eat it, except on special occasions. It is exceedingly interesting to go down to the wharf (the Broomielaw) when the great ships come in with their heavy freights of American fruit. I boarded a vessel one day last week and inquired how many barrels were on board, and the purser showed me the manifest for 5,150.

RECENT PUBLICATIONS.

A catalogue of novelties and specialties has been issued by A. Blanc & Co., Philadelphia; also a pamphlet describing scaline, the new forage plant which has proved of great value in France.

A valuable agricultural publication is the annual hand-book or bulletin containing the papers and discussions of the farm institutes of the year held in various places in Wisconsin A. D. Barnes, nurseryman, of Waupaca, Wis., is a prominent institute lecturer.

The twelfth annual report of the Board of Control of the New York Agricultural Experiment station, at Geneva, N. Y. of which William C. Barry, of Ellwanger & Barry, is president, contains the usual comprehensive and interesting account of the work of this progressive station. It is illustrated with half-tone engravings which add much to the interest of the report. The carefully prepared tables and lists are of great value.

Meehan's Monthly is one of the most meritorious publications of its kind. It appeals to the most intelligent taste in horticulture, botany and rural topics, and it is recognized as authority upon any subject of which it treats. It is a pleasure to note that this publication is to be increased in size four pages. This move will give the publishers opportunity to broaden the scope of the work somewhat. A feature of each issue is the lithograph which forms the frontispiece. Germantown, Pa. —Thomas Meehan & Sons.

"The Book of the Fair" increases in interest and value. Part 16 concludes the chapter on transportation and contains chapters 19 and 20 on the live stock department and the departments of anthropology and ethnology. Each of these features is handsomely illustrated with the excellent half-tone engravings for which this work is noted. The high standard set up by the publishers at the start has been maintained throughout each number. "The Book of the Fair" is the only publication of its kind worthy of the highest commendation. A valuable contribution to the artistic literature of the day it preserves in the most beautiful and realistic form the wonders of the greatest exhibition of any age. It is an appropriate addition to the long line of works which have made its publishers universally known. Chicago: The Bancroft Company.

INDEX TO VOLUME II.—FEBRUARY, 1894 TO JANUARY, 1895.

Among Growers and Dealers,
9, 18, 32, 47, 63, 75, 87, 100, 116, 134, 149, 160
Art and Nature, - - - - - - 22
Advice to the Planter. - - - - 26
Arboreta, - - - - - - - 27
American Association, - - 30, 46, 68, 76
Assistance for Mr. Bull, - - 77, 163
Albaugh, N. H. - - - - - 89
Apple Orchards Affected, - - - 90
American Ornamentals, - - - 110
Among the Fruits, - - - 112, 131
An Oregon Incident, - - - 112
A Novelist's Lament, - - - - 127
Apricot Growing, - - - - - 127
American Pomological Society, - - 139
Apple Crop, - - - - - - 149
Annual Reports, - - - - - 10
American Carnation Society, - - 32
Antwerp Exhibition, - - - - 92
Apple Export, - - - - - 166
Asa D. Barnes, - - - - - - 161
Apples in Scotland, - - - 165

Bailey, Prof. L. H. - - - - - 29
Brown, Charles J. - - - - - 41
Bordeaux Mixture, - - - - - 105
Birch Grafting, - - - - - 112
Blackberry Improvement. - - - 147
Borer Not First Cause, - - - 164
Bull, E. W. - - - - - - 163
Ben Davis Apple, - - - - 64

Century Plant, - - - - - - 17
Colorado Orchards, - - - 30, 49, 147
Colorado Fruit Culture. - - - 36
Corners Stolonifera, - - - 45
California Stock, - - - - - 49
Crop Bulletin, - - - - - 49, 103
Curtice, Chas. S. - - - - - - 101
California Fruit, - - 32, 101, 157, 161
Cemetery Superintendents, - - 113
Cut Plantings in Two, - - - 114
Condition of Fruit, - - - - 115
College of Horticulture, - - - 119
Condition of Trade, - - - - 130
Commercial Orchards, - - - 131
California Pomologists, - - - 157
California Orchards, - - - 161
Champion Peach, - - - - - 163
Chestnut Culture, - - - - 165
Committee on New Fruits, - - - 10
California Fruit Union, - - - 10
Canadian Experiment Stations, - - 64

Diseased Nursery Stock, - - - 30
Davis, Franklin, - - - - 113
Declared Unconstitutional, - - - 144

Eastern Nurserymen's Association, - 6
Eastern Stock in West, - - - 20
Echoes from Niagara Falls, - - - 91
English Fruit Growers, - - - 134
Encouraging Outlook, - - - 146

From Various Points, 10, 32 64, 92, 150, 167
Fruit in England, - - - 50, 118
Fall Sales, - - - - - - 124
Fruit on Georgian Bay, - - - 142
Fall Work at N. Topeka, - - 147
Fall Planting, - - - - - - 166

Grapes, New and Old, - - - - 49
Gardener's Protest, - - - - 59
Greenville Strawberry, - - - 77
Geneva Notes, - - - - - 93
Green Mountain Grape, - - - 101
Gooseberry Culture, - - - 105
Grape Industry, - - - 131, 143, 147
Georgia Peach Crop. - - - 145
Green Carnations, - - - - 147
Grafting, - - - - - - - 161
Grand Rapids Fruit Growers, - - 150
Grapes for England, - - - - 64

Horticultural Literature. - - - 3
Higher Prices, - - - - - 4
Horticultural Societies. - - 8, 147
Hoover, S. W. - - - - - 19
Hale, J. H. - - - - - - - 75
Hale's Big Orchards, - - - 103
Hole, S. Reynolds, - - 140, 146, 163
Hunt, M. A. - - - - - - 64

Injurious Insects, - - 3, 30, 147, 148
Illinois State Society, - - - - 10
Imported Stocks, - - - - 73
Insect Destroyer, - - - - 77
Illinois Business, - - - - 88
In Various States, - - - - 103
Investigation of Varieties, - - 128
In the Miami Valley, - - - - 142
Iowa Horticultural Society, - - - 154

Japanese Plums, - - - - - 31
Jackson & Perkins' Nursery, - - 62
Japan Ivy, - - - - - - - 115

Kansas Fruit Trees, - - - 32, 99
Kansas Horticultural Society, - 156
Kieffer Pear, - - - - - - 128

Leaf Diseases, - - - - - - 3
Less Stock and Better, - - - 8
Late Market Strawberry, - - - 17
Legislation on Insects, - - - 31
Library of Plants, - - - - 34
Landscape Gardening, - - - 118
Leaf Blight, - - - - - - - 150

Minnesota State Society, - - - 5
Michigan State Society, - - - 6
Minnesota Forestry Association, - - 6
Municipal Nurseries, - - - 8
Mistaken View, - - - - - 76
Monroe Matters, - - - 88, 111 151
Missouri Business, - - - - 88
Model Packing House, - - - 139
Missouri Fruit Prospects, - - 92, 150
Missouri Horticultural Society, - 157

Novelties, - - - - - - - 15
Northwest Nursery Association, - 19, 30
Night Prowling Peach Pests, - - 57
New Book by Bailey, - - - 61
Nursery Exhibits, - - - - 70
Nursery Industry in East, - - 70
Nursery Industry in South, - - 71
Nursery Industry in North, - - 71
Nursery Industry in West, - - - 73
Nurserymen's Kicks, - - - 80
Nurserymen's Novelties. - - - 80
New Small Fruits, - - - - 86

Nurseries in Danger, - - - - - 90
Nurseryman's Suit, - - - - 64, 91
New Fruits, - - - - - - 101
New York State Fair, - - - 115
No Over-Production, - - - - 143
National Rose Society, - - - 150
New York Botanical Garden, - - 92
Nixon Law, - - - - - - - 92
New Jersey Horticultural Society, 164
Newark, N. Y., News, - - - 164
National Irrigation Movement, - - 162
Notice to Washington Nurserymen, 164

Outlook for Fruit Growers, - - 3
Outlook in the West, - - - - 9
Official List of Plants, - - - 61
Official Journal, - - - - 77, 81
Outlook at Dansville, - - - 88
One Remedy for Prices, - - - 102
Orchid Collections, - - - - 112
Olden Fruit Farm, - - - - 126
Ohio Horticultural Society, - - 157
Ontario Fruit Growers, - - - 158
Officers Elected, - - - - - 160
Old Orchards, - - - - - 92

Peach Growing, - - - - - 7
P. Barry Pear, - - - - - - 8
Pennsylvania Horticulturists, - - 10
Prune Raising, in Oregon, - - - 17
Protect Eastern Orchards, - - 44
Pratt's Packing Grounds, - - - 46
Peaches and Grapes of 1894, - - 58
Perkins, C H. - - - - - - 59
Protect the Originator, - - - 60
Pear Culture, - - - - - - 73
Promising Field, - - - - - 86
Peach Yellows, - - - 86, 92, 129
Prunus Simonii, - - - - - 105
Palmer, John, - - - - - - 129
Planting Nursery Stock, - - - 144
Pears in Europe, - - - - - 145
Prune Culture in Idaho, - - - 64
Plant Propagation, - - - - 92
Planter Seeking Knowledge, - - 159
Pierson, Frank R., - - - - 163

Root Grafting, - - - - - - 11
Results of Spraying, - - - - 17
Recent Publications,
10, 22, 33, 50, 64, 93, 104, 117, 134, 151, 165
Russian Varieties, - - - - 100, 132
Reign of the Chrysanthemum, - - 146
Riley, Prof. C. V, - - - - - 64

S. W. Iowa Society, - - - - - 6
Sterility of Pear Orchards, - - 28
Spring Sales, - - - - - - 39
Season's Trade, - - - - - 44
St. Petersburg Show, - - - - 48
San Jose Scale, - - - 48 131, 133
Substitution, - - - - - - 56
Shade Tree Law, - - - - - 56
Spraying Nursery Stock, - - 97, 102
Seedling Currants. - - - - 99
Society of American Florists, - - 102
Santa Rosa Valley, - - - - - 110
Season at Geneva, - - - - - 111
Seventy Firms Represented, - - 114
Seed Distribution, - - - - 131
Stock Suited to Sections, - - - 131

Season at Berlin, Md. - - - 144
Secretary Morton's Report, - - 149

Tree Labels, - - - - - - 7
Tariff, - - - - 20, 48, 74, 103, 116
Tree Peddler's Retort, - - - 47
The Outlook, - - - - - - 60
These Trees Not Burned, - - - 61
Texas as a Fruit State, - - - 101
Thayer, James A. - - - - - 145

Underwood J. M. - - - - - 7
Utah Nursery Co., - - - - 142
Unscrupulous Methods, - - - 147

Value of Fruit, - - - - - - 7
Value of Association, - - - 21
Vineyard Companies Succumb, - - 46
Value of an Orchard,- - - - 101

W. N. Y. Horticulturists, - - 3
Windbreaks, - - - - - - - 3
Washington Prospects, - - - 18
Western Grower's Experience, - - 25
Washington Fruit Culture, - - 29
Washington Horticulturists - - 31, 91
Wilson Bill, - - - - - - 48
Where Trees Are Wanted, - - - 56
World's Horticultural Society, - - 61
Western Grower's Comments, - - 62
Withoft Fred'k G. - - - - - 81
What Trees to Plant, - - - - 33
Whole or Piece Roots, - - - 119
Work on Long Island, - - - - 147
What Tribunal Shall Decide, - - 148
Warning to Nurserymen, - - - 148
Western Trees in East, - - - 151

Seedling Apples, - - - - - 32
Seed Trade Association, - - - 92
Snow Apple, - - - - - - 166
Southern Illinois Horticulturists, - 158

Trade in Kansas, - - - - - 155
True Stock, - - - - - - 160
Two Years Old, - - - - - 162

Vincennes, Ind., - - - - - 155

Wisconsin News, - - - - - 155
W. N. Y. Horticulturists, - - - 158
Wild Fruits in Rockies, - - - 165
Western Wholesale Nurserymen, - 167

INDEX TO ILLUSTRATIONS.

American Association, - - - - 66
Albaugh, Hon. N. H., - - - 89

Bailey, Prof. L. H., - - - - 29
Barnes, Asa D., - - - - 161
Brown, Charles J., - - - - 43

Cross of Johnson's Late, - - - 14
Curtice, Charles S., - - - - - 101

Davis, Franklin, - - - - - 113

Farmer's Nursery Co., - - - - 138

Green Mountain Grape, - - - 96

Hale, President J. H., - - - - 75
Hoover, S. W., - - - - - 19
Horticulture in Colorado, - - - 86

Jackson & Perkins' Grounds, - - 54

Kieffer Pear, - - - - - - 24

Mount Hope Nurseries, - - - 154

Olden Fruit Farm, - - - - 122

P. Barry Pear, - - - - - - 2
Pratt's Packing Grounds, - - - 38
Perkins, C. H, - - - - - 59
Palmer, John, - - - - - - 129

Santa Rosa Valley, - - - - - 110

Thayer, James A, - - - - - 145

Underwood, J. M., - - - - - 7

WESTERN WHOLESALE NURSERYMEN.

KANSAS CITY, Mo., Dec. 19.—The Western Association of Wholesale Nurserymen held its regular semi-annual meeting yesterday afternoon at the Centropolis. About thirty members were present from Missouri, Kansas, Nebraska, Iowa and Alabama. The subject of the best methods to propagate trees was discussed. Exchanges of fruit stock were made between the members.

The officers elected for the ensuing year are: President, H. T. Kelsey, of St. Joseph, Mo.; vice-president, R. H. Blair, of Kansas City; secretary and treasurer, U. B. Pearsall, of Fort Scott, Kan.; executive committee, D. S. Lake, Shenandoah, Ia.; F. H. Stannard, of Ottawa, Kan.; Peter Youngers, of Geneva, Neb.; J. W. Shuett, of St. Louis, and L. R. Taylor, of Topeka.

The next meeting will be held in this city, June 18, 1895.

FROM VARIOUS POINTS.

The original Snow apple tree, now 70 years old, still bears fruit. The tree was planted by Opollis Dewey, on his farm between Pontiac and Birmingham, and the experience of grafting brought forth a new apple, which, for lack of any other name, was styled the Snow apple.

There were 1,328,806 barrels of apples shipped from this country to foreign ports in 1880. After that the shipments dwindled to only 81,532 barrels in 1883. The exports then rapidly increased, and 1,450,336 barrels were shipped abroad in 1893, which was the banner year in the history of the American apple trade.

Established upwards of a Century.

BY ROYAL WARRANT TO H.R.H. THE PRINCE OF WALES

Whinham's Industry Gooseberry

In a few successive seasons we have sold of this variety **1,362,000** bushes, and have already, up to the end of December, sold for this season's delivery over **185,000** bushes, and are still receiving orders for . . . . . this item by most every American mail. . . . . .

1 YEAR STRONG; 2 YEAR ORDINARY; 3 YEAR ORDINARY;
1 YEAR SELECTED; 2 YEAR SELECTED; 3 YEAR SELECTED
4 YEAR SELECTED.

CAREFULLY GRADED FOR AMERICAN TRADE.

KEEPSAKE GOOSEBERRY.

A straw colored Gooseberry of excellent flavor; one of the earliest in cultivation; was fit for pulling green on the 24th April, last season. *3 year bushes.*

VICTORIA BLACK CURRANT. (New.) The largest Black Currant in cultivation. 1 year plants.

RHODODENDRONS.—Named Hybrids; Hybrid Seedling Ponticum, 9 to 12 inches; 12 to 18 inches; 18 to 24 inches.

MANETTI STOCKS and Multiflora de la grifferae. Strong, carefully graded.

CRIMSON RAMBLER ROSE. New.

H. P. ROSES OF SORTS. Strong, vigorous, well-rooted.

MOUNTAIN ASH, 1½ to 2 feet, 2 to 3 feet; NORWAY MAPLE, 12 to 18 inches, 18 to 24 inches; NORWAY SPRUCE, 9 to 12 inches, 12 to 15 inches; SILVER BIRCH, 15 to 24 inches.

GENERAL NURSERY STOCK.
PRICED LISTS FREE ON APPLICATION.

WM. FELL & CO., Nurserymen and Seedsmen,
HEXHAM, ENGLAND.

Telegraphic Code of the American Association of Nurserymen used.
Cablegrams, FELL, Hexham, England.

We Have Just What You Want in . .

APPLE SEEDLINGS AND APPLE ROOT GRAFTS.

Any style graft you wish, *Piece Root* or *Whole Root*.
. . . Straight Roots or Branched Roots . . .

IT WILL PAY YOU TO GET OUR PRICES BEFORE PLACING YOUR ORDERS.

Also, a General Line of Nursery Stock.

☞ ASK FOR WHOLESALE PRICE LIST.

W. A. WATSON & CO., - - Normal, Ill.

MEECH'S QUINCE and others, 1 year, 3 to 4 feet, and light 2 year.
50,000 Wilson Early.
50,000 Wilson Jr.
75,000 Early Harvest.
200,000 Barr's Phila Mam. Asparagus, 2 years.
200,000 Strawberry Plants, leading old and promising new sorts.
Peach Trees, Apple Trees, Carolina Poplars. Silver Maples, Tulip Trees, Evergreens, &c. KEIFFER PEARS, extra fine.

West Jersey Nursery Co., STANTON B. COLE, *Bridgeton, N J.*

LEVAVASSEUR & SONS

NURSERIES,

USSY (CALVADOS) AND ORLEANS, FRANCE.

Largest Growers and Exporters of all kinds of

NURSERY STOCKS TO THE UNITED STATES.

Best Grading Quality and Packing.

Send your List of Wants for Special Prices to . . . . . .

BERKHAN & OTGEN,

39 and 41 Cortland St., - - - - - - - New York.

Sole Agent for the United States and Canada.

THE R. G. CHASE COMPANY,

GENEVA, N. Y.,

Offer a FINE STOCK of the following varieties for delivery Spring of 1895, at LOW PRICES. They solicit correspondence and will be pleased to quote prices, either for cash or in exchange for anything that they may need.

APPLES.—Longfield, Pewaukee, Princess Louise, Sutton Beauty, Walbridge.
CRABS.—Excelsior, Hyslop, Van Wyck.
STD. PEARS.—Flemish Beauty, *Idaho*, Winter Nellis.
DWF. PEARS. Howell, *Idaho*, Lawrence, Seckel.
QUINCES.—*Orange.*
PEACHES.—Champion.
ORNAM. SHRUBS.—Cornus Elegantissima, Deutzia Candida and Gracillis, Spirea Aurea and Collosa, Syringa Garland, Sambucus Golden, Weigelia; Candida and Rosea.
ORNAM. TREES.—Birch Cut Leaf, 7 to 8 feet, 5 to 6 feet, and 4 to 5 feet; Elm (American), 9 to 10 feet; Negundo Maple, 8 to 10 feet; Silver Maple, 8 to 10 feet; Poplar (Carolina), 10 to 12 feet; Oriental Sycamore, 9 to 10 feet.
EVERGREENS.—Norway Spruce, 18 to 36 inches.

EVERYTHING IN THE WAY OF

SMALL FRUIT PLANTS.

LARGEST STOCK IN OHIO. PRICES TO SUIT THE TIMES.

Over **3,000,000 Strawberry Plants** of new and old varieties, grown from new beds. Special quotations in 50 to 100-thousand lots.

ALSO AN IMMENSE STOCK OF

Raspberries, Blackberries, Currants, Gooseberries, Grapes, Rhubarb, Asparagus, &c.

OUR SPECIALTIES FOR 1895:

Greenville and Timbrell Strawberries, Eureka Raspberry, Ohmer and Eldorado Blackberries, North Star Currant.

SPRING PRICE LIST READY FEBRUARY 1ST. WRITE FOR PRICES ON WHAT YOU WANT NOW.

W. N. SCARFF, = = New Carlisle, Ohio.

GRAPE VINES

IMMENSE STOCK, LARGE ASSORTMENT.

Correspond with us and get samples and prices before placing your orders. Introducers of the new early black grape, . . .

. . EARLY OHIO, . .

Ten days earlier than Moore's Early, and three times as productive.

Address, **C. S. CURTICE CO., Portland, N. Y.**

Miller Red Raspberry

Is the coming market variety. EARLY, LARGE, and PRODUCTIVE as any. Perfectly hardy, and the best shipper . . ever sent to New York and Philadelphia markets . .

FULL LINE OF NURSERY STOCK. CIRCULARS FREE.

MYER & SON, Bridgeville, Del.

Cogdall Fruitland, *SPRINGFIELD, ILL.,*

OFFER FOR THE SPRING TRADE,

50,000 Ohio, 30,000 Gregg, 20,000 Palmer, 30,000 Nemeha, 20,000 Soughegan, 20,000 Tyler Raspberry Tips; 50,000 Snyder Blackberry Plants; also a limited number of Freeman, Ohio Jr., World Fair and Rural New Yorker Seed Potatoes.

J. W. COGDALL, Springfield, Ill.

1,000 DUTCHMAN PIPE, STRONG 2-YEAR OLD.

200 VAR. LEAF ALTHEA, 4 TO 5 FEET. FINE PLANTS.

WRITE AND GET MY PRICES.

C. L. YATES, - ROCHESTER, N. Y.

2,500 STANDARD AND DWARF PEARS, mostly Keiffer.

10,000 CHERRIES, mostly sour sorts.

ORANGE QUINCE.

Maple and Mountain Ash, Catalpa, Evergreens, Deutzia Creneta, Pirus Japonica.

F. X. HEMM, - - - - - - - PIQUA, OHIO.

1,000,000 BERRY PLANTS, none finer, none truer.
ASPARAGUS ROOTS.
Headquarters for true second crop sced Irish Potatoes, 1 barrel worth 2 of northern seed.

All kinds of Nursery Stock. Maryland Farms for Sale, Eggs, Etc.

My Descriptive Catalogue sent Free. Send list of wants. Wholesale and Retail.

J. W. HALL, = = = = MARION STATION, MD.

SITUATION WANTED by a thoroughly competent Nursery office book-keeper, correspondent and stenographer. Twelve years experience with two large firms, wholesale and retail. Rapid and correct biller, and has long experience handling agents. Moderate salary. Good references. Address, "X X X X," care *The National Nurseryman.*

W. T. HOOD & CO.,

OLD DOMINION NURSERIES,

RICHMOND, VA.

Surplus: Apple, Standard Pear, Peach; Plums, including Willard, Downing and New American Mulberry; Concord Grapes; California Privet; Fifty Thousand Peach Seedling from Nat. Pits, and general line of Nursery Stock which we can ship on short notice.

100 POUNDS JAPAN PEAR SEED.

WANTED. 20,000 one-year branched XX PEAR STOCK.
10,000 QUINCE, XX.
20,000 Mahaleb medium BLACKBERRIES, GOOSEBERRIES, &c., &c., &c.

Guaranteed to be free from Aphis or Disease.

WELL GRADED.

Send For Samples and Prices.

LARGE STOCK.

APPLE SEEDLINGS

ALSO

Osage, Mulberry, Honey Locust and

SHADE TREES

OF ALL SORTS.

Address, YOUNGERS & CO., Geneva, Neb.

SNOWHILL NURSERIES

Now Offer for Fall Delivery, 1894,

PEACH TREES, Fine Growth and Strictly Healthy, one year old from buds, and June Buds, all the most popular varieties, including **CROSBY** and **CHAMPION.**

Also, 20,000 1-YEAR OLD APPLE.
2,000 NORWAY MAPLES, 8 to 9 feet.
5,000 CAROLINA POPLARS, 9 to 12 feet.
20,000 1-YEAR OLD GRAPE VINES.
500,000 ASPARAGUS ROOTS, 1 and 2 years old.

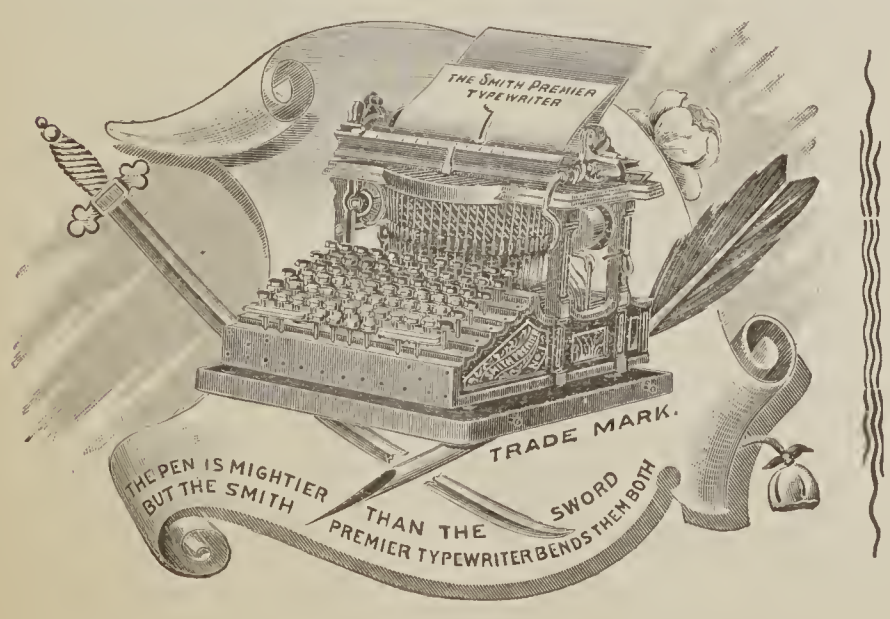
TWO MILLION STRAWBERRY PLANTS.

PRICE LIST NOW READY. CORRESPONDENCE SOLICITED.

Address,

W. M. PETERS' SONS,

WESLEY P. O., WORCESTER CO., MARYLAND.



The Smith Premier

Wins on its merits. The favorite everywhere.
Surpasses all older machines.
Properly used always in order.
Outlasts all others and retains alignment.
Automatically cleaned without extra attachments.
Almost noiseless, corrections easy, mistakes prevented.
Used exclusively by Associated Press, of New York, to take dispatches direct from the wire.
Rapidly being adopted by the Government.
Offices in leading cities.

THE SMITH PREMIER TYPEWRITER CO., Syracuse, N. Y., U. S. A.

ROCHESTER, N. Y., OFFICE.

407-410 POWERS BLOCK.

STARK BRO'S

Nurseries and Orchards Co.,

LOUISIANA, MO. ⊡ **ROCKPORT, ILL.**

All FRESH land and the very finest nursery soil A very large general stock. Fruit trees by the million.

Staples, also many new leaders and favorites, including:

APPLE—Akin, Ark, Black, Babbit, Sefferis, Kinnaird Choice, Nero, Paragon (Mam. Black Twig, Arkansas), Rainbow, Shackleford, Springdale, York Imp'l, etc.

PEAR—Bessimianka, Garber, Idaho, Koonce, Krull, Japan Golden Russet, Margaret, Pres't Drouard, etc.

CHERRY—Abbesse (Sweet Duke, best grower and hardiest Duke); Bl'k Tartarian, Improved, Cal Advance, Ida, Montmorency Ord Ostheimer, Suda Hardy, Windsor, etc.

PLUM—Abundance, Burbank, Clyman, Freestone Damson, Majestic Damson, Forest Rose Improved, Mo. Green Gage, Stark Green Gage, Mo. Apricot, Orient, Pool Pride, Tragedy and Golden prunes, World Beater, etc.

PEACH—Gold Dust, Northern Ap't, Sneed, Champion, etc.

APRICOTS—Sunrise, Noonday—new **large** Russians.

CRAB—Florence, Gibb, Richland Sweet, Looker, Winter, etc.

GRAPES, GOOSEBERRIES, CURRANTS, BLACKBERRY, RASPBERRY, ORNAMENTAL TREES, EVERGREENS, ROSES, SHRUBS.

NIAGARA NURSERIES
ESTABLISHED 1839

PEAR TREES

AND ALL OTHER NURSERY PRODUCTS.

E. MOODY & SONS
LOCKPORT, N.Y.

COMPLETE STOCK. WHOLESALE AND RETAIL.

SHENANDOAH NURSERY Offers to the trade a large stock of Apple Trees, 1st-class, strong on northern sorts.

Apple, Cherry, Plum Seedlings,
Apple Grafts Made to Order.

Apple, Cherry, Plum SCIONS.

Cherries, Grapes, Shade Trees (large and small), Evergreens, Roses, Etc.
Plum on Plum (Native and European varieties).

PRICES LOW. Correspondence solicited.

Address D. S. LAKE, Prop., Shenandoah, Iowa.

WE are in the lead with Quality and Prices

Apple Trees,

Apple Seedlings,

Apple Root Grafts.

Let us Price your Wants.

F. W. WATSON & CO.,

TOPEKA, KANS.

Peach Trees.

These have been a leading feature of our business for over forty years, and we offer the present season the largest stock we ever grew, including Champion, Crosby and other new varieties. Special prices on car-load lots. We also have a fine stock of Apples, Pears, Plums (especially Japan sorts), Apricots, etc.

In the Ornamental Department

we call attention to our fine assortment of SHADE TREES, especially NORWAY, SUGAR and SILVER MAPLES, CAROLINA POPLARS, ETC., which we can offer in large quantities of all sizes.

Our Collection of Flowering Shrubs

is unsurpassed in this country, and embraces the most popular varieties known to the trade.

For Semi-annual Trade List, and Retail Descriptive Catalogues of the several departments, address

HOOPES BRO. & THOMAS,

Maple Avenue Nurseries, WEST CHESTER, PA.

Willowdale Nurseries.

SURPLUS STOCK FOR THE

FALL OF 1894.

All Young and Thrifty and First-Class in Every Respect.

75,000 Apple Trees.
85,000 Peach Trees, including Crosby and Champion.
6,000 Carolina Poplar, 2 and 3 years.
3,000 Apricots, 1 and 2 years
1,000 American Arborvitæ, 4 to 5 feet, and also smaller sizes by the 1,000, (fine),
500 Prunus Pissardi.
100,000 Osage Orange, strong, 1 year.
200,000 Barr's Mammoth Asparagus, 1 and 2 years.

Also a full line of Nursery Stock of our own growing. Send list of your Wants for prices. Address,

RAKESTRAW & PYLE,

WILLOWDALE, = = = CHESTER CO., PA.

When writing to advertisers mention The National Nurseryman.

Woodlawn Nurseries,

ROCHESTER, N. Y.

ALLEN L. WOOD.

WHOLESALE ONLY.

GROWER OF SMALL FRUIT PLANTS FOR NURSERYMEN AND DEALERS.

We have the following Plants in our cellar for Early Spring Shipment, in large quantities :

RASPBERRIES—Brandywine, Cuthbert, Caroline, Brinckle Orange, Golden Queen, Herstine, Marlboro, Thompson Early, Doolittle, Gregg, Kansas, Lovett, Mammoth Cluster, Ohio, Palmer, Souhegan, Shaffer's, Colossal and Tyler.

BLACKBERRIES—Agawam, Early Harvest, Kittatinny, Taylor, Snyder, Wachusett and Wilson Early.

CURRANTS, 2 yrs., Fay's.

CURRANTS, 1 year (strong), Black Naples, Cherry, Fay, Versailles, North Star and White Grape.

STRAWBERRIES—Greenville, and other assorted kinds.

ASPARAGUS, 2 years, Conover's Palmetto and Elmira.

RHUBARB, 2 years, Myatt and Victoria.

Also, an assortment of GRAPES.

☞ **Wholesale Catalogue for Spring, ready March 1st—FREE**

GILBERT COSTICH,

ROCHESTER, N. Y.

For Fall, '94, and Spring, '95.

STD. AND DWF. PEAR, APPLE, PLUM. CHERRY, APRICOTS, SHRUBS, EVERGREENS AND ORNAMENTAL TREES.

Lowest Prices Given on Application. *GILBERT COSTICH, Rochester, N. Y.*

R. H. BLAIR & CO.,

Office Northwest cor. 11th & Walnut Sts.,

KANSAS CITY, MO.

Proprietors of Lee's Summit Nurseries.

Established in 1866 by Blair Bros. Wholesale and Retail.

STRICTLY No. 1 APPLE TREES BY CAR LOTS, AND RUSSIAN AND AMERICAN APRICOTS AND NATIVE PLUM. ROSES, ORNAMENTAL AND SHADE TREES.

Prices Low. No better shipping facilities. We are not surpassed by any in the West in number of acres or quality of stock. We have the only practical Box Clamp in use. Price reduced.

Clematis Paniculata.

Fine stock of first-class and extra heavy plants. Lowest rates.

HEADQUARTERS FOR

HARDY PERENNIALS.

Phlox, Iris, Paeonies, Pyrethrums, Gaillardias, Poppies, Campanulas, Columbines, Etc., Etc.

FINEST COLLECTION IN AMERICA.

LARGE STOCK OF LIGUSTRUM IBOTA, LIGUSTRUM MEADIA,

The two, new, perfectly hardy hedge plants.

HEAVY WHOLESALE LOTS of Lonicera Morrowii, Red Cornels, Forsythia suspensa, Golden Poplars, Norway Maples, Golden Russian Willow, Etc., Etc.

The Reading Nursery,

JACOB W. MANNING, Proprietor,

READING, MASS.

☞Trade Lists Ready.

YOUNG MAN thoroughly experienced in details of retail nursery business would like to arrange with Grower to conduct retail business. Address "J. T.," care *The National Nurseryman,* ROCHESTER, N. Y.

SO MANY are accepting our special offer on Whole Root Grafts, we are disposed to extend the time limit on placing orders for same until January 25, 1895, for the benefit of those who may yet desire to purchase them.

Our regular Piece Root Grafts will be of a superior quality this season, yet price no higher. We wish especially to call your attention to this branch of our business. Write for prices and samples.

While we yet have a limited supply of No. 1 and No. 2 Apple Seedlings as well as a No. 1 heavy grade, *Branched* Apple Seedlings, we wish especially to call your attention to our supply of home grown Pear Seedlings from French pear seed, in following grades :

3-16 inch and up all *branched* root.
3-16 inch and up all straight tap root.
1-4 inch and up all straight tap root.

These seedlings are very strong, in perfect condition, and the pear seedlings have good, long tops.

We will be pleased to send samples and quote prices so long as our supply lasts.

Address,

H. C. GRAVES & SONS, - LEE'S SUMMIT, MO.

T. C. WILSON,

East Side Nurseries. **Established 1855.**

· · BRIGHTON, N. Y. · ·

I have to offer for Fall 1894, and Spring 1895, the following strictly first-class stock :

75,000 APPLE TREES,	25,000 STANDARD PEARS,
10,000 DWARF PEARS,	15,000 PLUM TREES,
15,000 CHERRY TREES,	10,000 PEACH TREES.

ALSO A FINE ASSORTMENT OF

QUINCE BUSHES, CURRANT BUSHES,
GOOSEBERRIES,
ORNAMENTAL AND SHADE TREES,
TREE ROSES, H. P. ROSES,
SHRUBS AND VINES.

Write and get my prices before ordering elsewhere.

When writing to advertisers mention The National Nurseryman.

JOHN PALMER & SON, Ltd.,

ANNAN NURSERIES, - - DUMFRIESSHIRE, SCOTLAND,

Have for FALL and SPRING SHIPMENT an IMMENSE STOCK of

INDUSTRY GOOSEBERRIES, one, two and three years, carefully selected and well graded.

WHITESMITH, CROWN BOB, and LANCASHIRE LAD GOOSE BERRIES, No. 1 stock.

H. P. AND MOSS ROSES, best sorts, strong and good.

TREE ROSES, good bushy heads, good roots.

NEW POLYANTHA ROSE, "Crimson Rambler," the finest of its class in the world.

NEW HYBRID SWEET BRIERS, a sterling novelty.

CLEMATIS JACKMANNII, and other most popular varieties, two-years, strong plants.

RHODODENDRON, hybrid grafted, best and hardiest sorts from one to three feet.

RHODODENDRON PONTICUM, well set with flower buds, all sizes, very cheap.

MANETTII AND MULTIFLORA ROSE STOCKS, well rooted.

NORWAY MAPLES, 18 to 24 in., two to three and three to four feet. Straight trees, carefully transplanted.

CUT-LEAVED WEEPING BIRCH, two to three, three to four, and four to five feet.

MOUNTAIN ASH, SCOTCH LARCH, BIRCH AND ELMS, BEECH, LINDEN, CALIFORNIA PRIVET, NORWAY SPRUCE, AUSTRIAN AND SCOTCH PINE, HYDRANGEA PANICULATA GRANDIFLORA, and a general line of stock of the best sizes for export.

Lowest Through Rates to all points in the United States and Canada.

Catalogues Free.

Write for prices before ordering elsewhere. Correspondence and early orders solicited.

W. C. SLOCOCK,

WOKING, ENGLAND.

A LARGE STOCK GROWN SPECIALLY FOR THE TRADE.

CLEMATIS.—30,000 strong plants. Plenty of Jackmanii, Henryii and other leading sorts.

ROSES.—Standards and Dwarfs. All leading kinds in quantity.

RHODODENDRONS and other American plants.
FRUIT TREES and FRUIT TREE STOCKS. A large quantity.

HARDY, ORNAMENTAL EVERGREEN, DECIDUOUS TREES, SHRUBS and CONIFERS. A good collection.

FOREST TREES and FOREST SEEDLINGS.

. . . PRICED LIST ON APPLICATION. . . .

When writing to advertisers mention The National Nurseryman.

THE GENEVA NURSERY,

W. & T. SMITH CO., Geneva, N. Y.

Fruit Trees: (In Car-load Lots). Standard Pears, Dwarf Pears, Apples, Cherries, Plums, Peaches, Apricots, Quinces, Nectarines.

Small Fruits: Native and Foreign Grapes, Currants, Gooseberries (English and Native), Raspberries, Blackberries, Asparagus, Rhubarb.

Ornamental Trees: Imperial Cut-leaf Alder, Purple Beech, Cut-leaf Birch, Catalpas, Elms, Horse Chestnuts, Lindens, Magnolias, Maples, Mountain Ash, Poplars, Walnuts, Willows.

Evergreens: Norway Spruce, Balsam Fir, Arbor Vitæ, Junipers.

Ornamental Shrubs and Vines: Altheas, Almonds, Calycanthus, Cornus Elegantissima, Deutzias, Elders, Hydrangeas, Honeysuckles, Ampelopsis, Lilacs, Spireas, Snowballs, Syringas, Weigelias, Wistarias, etc.

TREE ROSES . . Hybrid Roses, Tea Roses, Climbing Roses, Moss Roses, Azalias, Rhododendrons, Clematis, Industry Gooseberry. . . . . .

Send List of your wants for prices. W. & T. SMITH CO.

GRAPE VINES NIAGARA All old and new varieties. Extra quality. Warranted true. *Lowest Rates.* Introducers of the

EATON.

Also other SMALL FRUITS. Descriptive Catalogue Free.

T. S. HUBBARD CO., Fredonia, N. Y.

ESTABLISHED 1852.

Phoenix Nursery Co., 600 Acres. . . . 13 Greenhouses.

(SUCCESSORS TO SIDNEY TUTTLE & CO.)

NURSERYMEN AND FLORISTS ❖ Wholesale and Retail.

Correspondence solicited and promptly answered.
Send list of wants for prices. Salesmen wanted.

P. O. BOX 1215. BLOOMINGTON, ILL.

The SPARTA NURSERIES Always have in stock their Dry Baled Moss. Same quality in bulk. . . . .

The Finest Grade of Strawberry, Raspberry and Blackberry Plants Ever Offered. Write for Prices.

Sparta, Wis., Aug 1, 1894. Z. K. JEWETT & CO.

NURSERYMEN Should read this, I have just what you want. Always in stock, a nice clean article of dry baled **SPHAGNUM MOSS.** No delay or freight charges from branch roads. Orders for less than large car load shipped the first day received.

L. G. THOMPSON,

Write me for easy terms and prices. *TOMAH, WIS.*

When writing to advertisers mention The National Nurseryman.

Andre Leroy Nurseries

ESTABLISHED 1780.

BRAULT & SON, Directors,

ANGERS, FRANCE.

SPECIALTY OF NURSERY STOCK.

AZALEAS, CAMELIAS, RHODODENDRONS, MAGNOLIAS, LILAC, ETC. . . . . .

AGENT FOR UNITED STATES AND CANADA, * * * *

ANDRE L. CAUSSE,

105 and 107 Hudson Street, New York City.

GEYER BROS., Growers of Fine Stock.

ROCHESTER, N. Y.

SURPLUS:

Apples, Standard Pears, Cherries, Plums, Dwarf Pears, Grape Vines and Roses

We offer a superior grade of stock that will give satisfaction in every particular.

WRITE FOR PRICES.

Orleans Nursery Co.

ORLEANS, FRANCE.

Growers of fine Fruit Stock, Shrubs, Evergreens, Roses, Ornamentals, etc., in large quantities. All orders carefully executed. Satisfaction guaranteed. Special prices on application.

Address all correspondence to our Sole Agents for United States and Canada.

BERKHAN & OTGEN,

39 and 41 Cortland Street, - - - - - - - - New York.

When writing to advertisers mention The National Nurseryman.

The best Equipped Printing and Bookbinding Establishment in Western New York.

The John P. Smith Printing House

SPECIALISTS IN NURSERYMEN'S PRINTING, BINDING, BLANK BOOK MANUFACTURING AND PAPER RULING.

Tennyson could take a worthless piece of paper, write a poem on it, and make it worth a fortune.

"THAT'S GENIUS."

A mechanic can take material worth $5.00 and make it into watch springs worth $1,000.00.

"THAT'S SKILL."

Vanderbilt can write a few lines on a slip of paper and make it worth millions of dollars.

"THAT'S CAPITAL."

A man that wants his printing done quick, and at reasonable prices, will come to us.

"THAT'S PRUDENCE."

We possess the Genius, the Skill, the Capital, and if YOU have the Prudence we can do business together, satisfactory to both of us. Correspondence solicited. . . . . .

THE JOHN P. SMITH PRINTING HOUSE,

72 AND 74 EXCHANGE STREET, (FIVE FLOORS,)

ROCHESTER, N. Y.

Printers to the National Nurseryman.

Headquarters for Colored Plates

AND

∴ Nurserymen's and Florists' Supplies. ∴



STECHER LITHOGRAPHIC CO.,

NORTH ST. PAUL STREET,

. . . . . ROCHESTER, N. Y.